Appendix E

Analytical Resources, Incorporated
Chemical and Grain Size Analysis Results

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Abbreviations

Data Reporting Qualifiers

Effective 12/28/04

Inorganic Data

U Indicates that the target analyte was not detected at the reported concentration

* Duplicate RPD is not within established control limits

B Reported value is less than the CRDL but ≥ the Reporting Limit

N Matrix Spike recovery not within established control limits

NA Not Applicable, analyte not spiked

H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U Indicates that the target analyte was not detected at the reported concentration

* Flagged value is not within established control limits

B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J Estimated concentration when the value is less than ARI's established reporting limits

D The spiked compound was not detected due to sample extract dilution

NR Spiked compound recovery is not reported due to chromatographic interference

E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

Geotechnical Data

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

F Samples were frozen prior to particle size determination

Chain of Custody

Chain of Custody
Documentation

prepared
for

GEC

Project: Klamath River Sediment Study

ARI JOB NOS.: JP03, JP06, JP11 & JP12

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Case Narrative

Client: GEC
Client Project: Klamath River Sediment Study; 21-1-12195-002
ARI Job Nos.: JP03, JP06, JP11, JP12
Matrix: Sediment
Date: 9 August 2006

Volatile Organic Compounds Analysis

The areas for the 3rd and/or the 4th internal standards were not within control limits following the initial analyses of samples C-9, S-1, C-2, S-1, C-10, S-1, C-5, S-1, C-7, S-1, C-11, S-1, C-8, S-1 and C-4, S-1. These samples were re-analyzed. The areas for the 3rd and/or the 4th internal standards were not within control limits for the re-analyses of all samples. It was concluded that the sample matrices were the cause of the poor IS recoveries. No further corrective actions were taken. The results for both analyses have been submitted for all samples.

It was noted that the results obtained for the re-analysis of sample C-7, S-1 were inconsistent with those obtained for the original analysis. This sample was analyzed a third time. The results obtained for the third analysis were not consistent with the results obtained for the other two analyses. It was concluded that a lack of sample homogeneity from container to container was the cause of the differences. No further corrective actions were taken. The results for all three analyses have been submitted for this sample.

Semivolatile Organic Compounds Analysis

These analyses proceeded without incident of note.

OP Pesticides Analysis

A matrix spike (MS) and a matrix spike duplicate (MSD) were extracted and analyzed in conjunction with sample C-1, S-1. The percent recovery for dimethoate was slightly low following the initial analysis of the MS. Since the percent recoveries for dimethoate were within acceptable QC limits for the MSD and the corresponding LCS, no corrective actions were taken.

OC Pesticides Analysis

These analyses proceeded without incident of note.

0011

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Client: GEC
Client Project: Klamath River Sediment Study
ARI Job Nos.: JP03, JP06, JP11, JP12
Matrix: Sediment

Date: 9 August 2006

Herbicides Analysis

The surrogate, 2,4-dichlorophenylacetic acid, was not recovered due to an interference following the initial analysis of sample C-10, S-1. The percent recovery has been reported as 'NR'.

PCB Analysis

These analyses proceeded without incident of note.

Total Metals Analysis

An MS was prepared and analyzed in conjunction with sample C-7, S-1. The percent recoveries for calcium and manganese were low following the initial analysis of the MS. Since the percent recoveries for all elements were within acceptable QC limits for the corresponding LCS, it was concluded that the sample matrix was the cause of the low recoveries. No corrective actions were taken.

Conventionals Analysis

An MS was prepared and analyzed for AVS in conjunction with sample C-7, S-1. The percent recovery was high following the initial analysis of the MS. The MS was re-prepared and re-analyzed. The percent recovery was within acceptable QC limits for the re-analysis. The results for the re-analysis only have been submitted.

An MS was prepared and analyzed for total cyanide in conjunction with sample C-4, S-1. The percent recovery was slightly low following the initial analysis of the MS. Since the percent recovery was within acceptable QC limits for the corresponding SRM, it was concluded that the sample matrix was the cause of the low recovery. No corrective actions were taken.

Client: GEC
Client Project: Klamath River Sediment Study
ARI Job Nos.: JP03, JP06, JP11, JP12
Matrix: Sediment

Date: 9 August 2006

Conventionals Analysis (con't)

An MS was prepared and analyzed for TKN in conjunction with sample C-4, S-1. The percent recovery was slightly low following the initial analysis of the MS. The MS was re-prepared and re-analyzed. The percent recovery was slightly low for the re-analysis. Since the percent recovery for TKN was within acceptable QC limits for the corresponding LCS, it was concluded that the sample matrix was the cause of the low recoveries. No further corrective actions were taken. The results for the original analysis only have been submitted for the MS.

A matrix duplicate (MD) was prepared and analyzed for TOC in conjunction with sample C-9, S-1. The RPD was high following the initial analysis of the MD. The affected samples were re-prepared and re-analyzed. The RPD was high for the re-analysis. It was concluded that a lack of sample homogeneity was the cause of the high RPDs. No further corrective actions were taken. The results for the original analyses only have been submitted for the MD.

The percent recovery for total sulfide was low following the initial analysis of the LCS associated with these samples. The LCS was re-prepared and re-analyzed. The percent recovery was within acceptable QC limits for the re-analysis. It was suspected that the low recovery for the original LCS was isolated to the LCS only and no samples were affected. The results for both LCSs have been submitted for comparison.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP03
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Five samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Smith Date: 7/26/06
Title: Lead Technician

0014

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP06
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Four samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gemma Smith Date: 7/26/06
Title: Lead Technician

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Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP11
Client Project: Klamath River Sediment Study	

Case Narrative

1. Seven samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from this job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Susan Stuite Date: July 31, 2006
Title: Lead Technician

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • 206-695-6200 • 206-695-6201 fax

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP12
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Four samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: _____ Date: 7/26/06
Title: Lead Technician

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Conventionals

SAMPLE RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Client ID: C-9,S-1
ARI ID: 06-12040 JP03B

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	7.43
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	21.5	1,000
Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	23.40
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	22.50
Total Volatile Solids	07/11/06 071106#1	EPA 160.4	Percent	0.01	11.32
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	4.22	219
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	40.9	213
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	41.1	298
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	4.06

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Client ID: C-2,S-1
ARI ID: 06-12041 JP03C

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	7.01
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	18.5	981
Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	27.10
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	23.10
Total Volatile Solids	07/11/06 071106#1	EPA 160.4	Percent	0.01	14.77
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	7.22	650
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	42.5	397
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	32.5	379
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	4.48

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Alkalinity	07/19/06	mgCaCO3/kg	< 5.0 U
Total Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
Preserved Total Solids	07/11/06	Percent	< 0.01 U
Total Volatile Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
N-Ammonia	07/13/06	mg-N/kg	< 0.10 U
Sulfide	07/13/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/18/06	mg/kg	< 1.00 U
Total Organic Carbon	07/13/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/19/06	std units	6.99	7.00	99.9%
Alkalinity	07/19/06	mgCaCO3/kg	120	118	101.7%
Sulfide	07/13/06	mg/kg	26.6	143	18.6%
	07/13/06		138	143	96.5%
Acid Volatile Sulfide	07/18/06	mg/kg	103	126	81.6%
Total Organic Carbon	07/13/06	Percent	0.513	0.500	102.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P123-506	07/19/06	mgCaCO3/kg	435	420	103.7%
N-Ammonia SPEX 28-24AS	07/13/06	mg-N/kg	87.9	100	87.9%
Total Organic Carbon NIST #8704	07/13/06	Percent	3.42	3.35	102.1%

REPLICATE RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JP03B Client ID: C-9,S-1					
pH	07/19/06	std units	7.43	7.37	0.8%
Total Solids	07/11/06	Percent	23.40	23.50 23.60	0.4%
Preserved Total Solids	07/11/06	Percent	22.50	22.50 22.60	0.3%
Total Volatile Solids	07/11/06	Percent	11.32	11.21 11.15	0.8%
N-Ammonia	07/13/06	mg-N/kg	219	223 221	0.9%
Total Organic Carbon	07/13/06	Percent	4.06	3.24 2.64	21.5%

MS/MSD RESULTS-CONVENTIONALS
JP03-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JP03B Client ID: C-9,S-1						
N-Ammonia	07/13/06	mg-N/kg	219	531	421	74.1%
N-Ammonia	07/13/06	mg-N/kg	219	532	416	75.3%

SAMPLE RESULTS-CONVENTIONALS
JP06-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Client ID: C-10,S-1
ARI ID: 06-12051 JP06A

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	7.16
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	20.4	1,730
Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	24.50
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	24.00
Total Volatile Solids	07/11/06 071106#1	EPA 160.4	Percent	0.01	12.65
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	20.0	1,210
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	79.5	1,350
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	197	1,830
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	3.67

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP06-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Client ID: C-5,S-1
ARI ID: 06-12052 JP06B

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	7.07
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	19.0	1,500
Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	26.30
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	24.00
Total Volatile Solids	07/11/06 071106#1	EPA 160.4	Percent	0.01	11.29
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	7.49	584
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	8.28	82.3
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	16.6	177
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	3.68

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JP06-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Alkalinity	07/19/06	mgCaCO3/kg	< 5.0 U
Total Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
Preserved Total Solids	07/11/06	Percent	< 0.01 U
Total Volatile Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
N-Ammonia	07/13/06	mg-N/kg	< 0.10 U
Sulfide	07/13/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/18/06	mg/kg	< 1.00 U
Total Organic Carbon	07/13/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JP06-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/19/06	std units	6.99	7.00	99.9%
Alkalinity	07/19/06	mgCaCO3/kg	120	118	101.7%
Sulfide	07/13/06	mg/kg	26.6	143	18.6%
	07/13/06		138	143	96.5%
Acid Volatile Sulfide	07/18/06	mg/kg	103	126	81.6%
Total Organic Carbon	07/13/06	Percent	0.513	0.500	102.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JP06-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P123-506	07/19/06	mgCaCO3/kg	435	420	103.7%
N-Ammonia SPEX 28-24AS	07/13/06	mg-N/kg	87.9	100	87.9%
Total Organic Carbon NIST #8704	07/13/06	Percent	3.42	3.35	102.1%

SAMPLE RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Client ID: C-7,S-1
ARI ID: 06-12092 JP11E

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.89
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	7.0	111
Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	72.10
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	50.00
Total Volatile Solids	07/11/06 071106#1	EPA 160.4	Percent	0.01	2.94
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	2.75	141
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	38.8	480
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	27.6	311
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	1.56

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Client ID: C-1,S-1
ARI ID: 06-12093 JP11F

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.86
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	5.6	51.1
Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	84.90
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	80.30
Total Volatile Solids	07/11/06 071106#1	EPA 160.4	Percent	0.01	1.27
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	1.17	54.8
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	2.25	42.6
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	5.06	47.9
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	0.389

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Client ID: C-11,S-1
ARI ID: 06-12094 JP11G

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.81
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	13.9	546
Total Solids	07/11/06 071106#2	EPA 160.3	Percent	0.01	36.50
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	34.70
Total Volatile Solids	07/11/06 071106#2	EPA 160.4	Percent	0.01	9.83
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	5.44	307
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	13.4	246
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	13.3	189
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	2.48

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Alkalinity	07/19/06	mgCaCO3/kg	< 5.0 U
Total Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
Preserved Total Solids	07/11/06	Percent	< 0.01 U
Total Volatile Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
N-Ammonia	07/13/06	mg-N/kg	< 0.10 U
Sulfide	07/13/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/18/06	mg/kg	< 1.00 U
Total Organic Carbon	07/13/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/19/06	std units	6.99	7.00	99.9%
Alkalinity	07/19/06	mgCaCO3/kg	120	118	101.7%
Sulfide	07/13/06	mg/kg	26.6	143	18.6%
	07/13/06		138	143	96.5%
Acid Volatile Sulfide	07/18/06	mg/kg	103	126	81.6%
Total Organic Carbon	07/13/06	Percent	0.513	0.500	102.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P123-506	07/19/06	mgCaCO3/kg	435	420	103.7%
N-Ammonia SPEX 28-24AS	07/13/06	mg-N/kg	87.9	100	87.9%
Total Organic Carbon NIST #8704	07/13/06	Percent	3.42	3.35	102.1%

REPLICATE RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JP11E Client ID: C-7,S-1					
Alkalinity	07/19/06	mgCaCO3/kg	111	141	23.8%
Sulfide	07/13/06	mg/kg	480	472	1.7%
Acid Volatile Sulfide	07/18/06	mg/kg	311	291	6.6%

MS/MSD RESULTS-CONVENTIONALS
JP11-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JP11E Client ID: C-7,S-1						
Sulfide	07/13/06	mg/kg	480	736	277	92.4%
Sulfide	07/13/06	mg/kg	480	1,000	520	100.0%
Acid Volatile Sulfide	07/18/06	mg/kg	311	554	251	96.8%

SAMPLE RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Client ID: C-8,S-1
ARI ID: 06-12109 JP12C

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.77
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	21.0	1,350
Total Solids	07/11/06 071106#2	EPA 160.3	Percent	0.01	24.10
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	21.10
Total Volatile Solids	07/11/06 071106#2	EPA 160.4	Percent	0.01	14.87
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	8.08	634
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	45.5	710
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	38.9	458
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	5.03

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Client ID: C-4,S-1
ARI ID: 06-12110 JP12D

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.87
Alkalinity	07/19/06	SM 2320	mgCaCO3/kg	20.2	1,890
Total Solids	07/11/06 071106#2	EPA 160.3	Percent	0.01	24.90
Preserved Total Solids	07/11/06 071106#1	EPA 160.3	Percent	0.01	20.00
Total Volatile Solids	07/11/06 071106#2	EPA 160.4	Percent	0.01	13.28
Total Cyanide	07/20/06 072006#1	EPA 335.2	mg/kg	1.00	2.01
N-Ammonia	07/13/06 071306#1	EPA 350.1M	mg-N/kg	19.5	924
Nitrate + Nitrite (NO3+NO2)	07/21/06 072106#1	EPA 353.2	mg-N/kg	0.40	< 0.40 U
Total Kjeldahl Nitrogen	07/19/06 071906#1	EPA 351.4	mg-N/kg	2,850	5,130
Total Phosphorus	07/24/06 072406#1	EPA 365.2	mg/kg	100	1,420
Sulfide	07/13/06 071306#1	EPA 376.2	mg/kg	47.3	288
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	39.4	324
Total Organic Carbon	07/13/06 071306#1	Plumb,1981	Percent	0.020	3.92

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.
NO2+NO3 determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Alkalinity	07/19/06	mgCaCO3/kg	< 5.0 U
Total Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
Preserved Total Solids	07/11/06	Percent	< 0.01 U
Total Volatile Solids	07/11/06	Percent	< 0.01 U
	07/11/06		< 0.01 U
Total Cyanide	07/20/06	mg/kg	< 0.050 U
N-Ammonia	07/13/06	mg-N/kg	< 0.10 U
Nitrate + Nitrite (NO3+NO2)	07/21/06	mg-N/kg	< 0.01 U
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	< 1.0 U
Total Phosphorus	07/24/06	mg/kg	< 0.16 U
Sulfide	07/13/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/18/06	mg/kg	< 1.00 U
Total Organic Carbon	07/13/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/19/06	std units	6.99	7.00	99.9%
Alkalinity	07/19/06	mgCaCO3/kg	120	118	101.7%
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	10.2	10.0	102.0%
Sulfide	07/13/06	mg/kg	26.6	143	18.6%
	07/13/06		138	143	96.5%
Acid Volatile Sulfide	07/18/06	mg/kg	103	126	81.6%
Total Organic Carbon	07/13/06	Percent	0.513	0.500	102.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P123-506	07/19/06	mgCaCO3/kg	435	420	103.7%
Total Cyanide EPA #05032	07/20/06	mg/kg	5.50	4.74	116.0%
N-Ammonia SPEX 28-24AS	07/13/06	mg-N/kg	87.9	100	87.9%
Nitrate + Nitrite (NO3+NO2) ERA #20034	07/21/06	mg-N/kg	0.49	0.50	98.0%
Total Phosphorus ERA #02102.1	07/24/06 07/24/06	mg/kg	0.96 4.56	2.00 10.0	48.0% 45.6%
Total Organic Carbon NIST #8704	07/13/06	Percent	3.42	3.35	102.1%

REPLICATE RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JP12D Client ID: C-4,S-1					
Total Cyanide	07/20/06	mg/kg	2.01	1.61	22.1%
Nitrate + Nitrite (NO3+NO2)	07/21/06	mg-N/kg	< 0.40	< 0.40 < 0.40	NA
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	5,130	5,430	5.7%
Total Phosphorus	07/24/06	mg/kg	1,420	1,480 1,450	2.1%

MS/MSD RESULTS-CONVENTIONALS
JP12-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JP12D Client ID: C-4,S-1						
Total Cyanide	07/20/06	mg/kg	2.01	29.4	37.3	73.4%
Nitrate + Nitrite (NO3+NO2)	07/21/06	mg-N/kg	< 0.40	351	403	87.2%
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	5,130	61,200	75,800	74.0%
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	5,130	38,000	46,700	70.4%
Total Phosphorus	07/24/06	mg/kg	1,420	13,100	11,800	98.9%
Total Phosphorus	07/24/06	mg/kg	1,420	13,800	12,600	98.6%

SAMPLE RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Client ID: J-1,S-1
ARI ID: 06-12485 JP75B

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.98
Alkalinity	07/25/06	SM 2320	mgCaCO3/kg	21.9	1,040
Total Solids	07/17/06 071706#2	EPA 160.3	Percent	0.01	22.80
Preserved Total Solids	07/17/06 071706#1	EPA 160.3	Percent	0.01	16.00
Total Volatile Solids	07/17/06 071706#1	EPA 160.4	Percent	0.01	15.40
N-Ammonia	07/18/06 071806#1	EPA 350.1M	mg-N/kg	44.6	915
Sulfide	07/20/06 072006#1	EPA 376.2	mg/kg	49.8	557
Acid Volatile Sulfide	07/19/06 071906#1	EPA 1991	mg/kg	43.7	656
Total Organic Carbon	07/18/06 071806#1	Plumb,1981	Percent	0.020	7.46

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Client ID: J-3,S-1
ARI ID: 06-12486 JP75C

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	7.10
Alkalinity	07/25/06	SM 2320	mgCaCO3/kg	6.0	164
Total Solids	07/17/06 071706#2	EPA 160.3	Percent	0.01	76.20
Preserved Total Solids	07/17/06 071706#1	EPA 160.3	Percent	0.01	74.20
Total Volatile Solids	07/17/06 071706#1	EPA 160.4	Percent	0.01	2.24
N-Ammonia	07/18/06 071806#1	EPA 350.1M	mg-N/kg	1.35	54.6
Sulfide	07/20/06 072006#1	EPA 376.2	mg/kg	4.01	10.3
Acid Volatile Sulfide	07/19/06 071906#1	EPA 1991	mg/kg	11.4	68.1
Total Organic Carbon	07/18/06 071806#1	Plumb,1981	Percent	0.020	1.24

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Client ID: J-5,S-1
ARI ID: 06-12487 JP75D

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	6.98
Alkalinity	07/25/06	SM 2320	mgCaCO3/kg	12.8	354
Total Solids	07/17/06 071706#2	EPA 160.3	Percent	0.01	39.30
Preserved Total Solids	07/17/06 071706#1	EPA 160.3	Percent	0.01	40.20
Total Volatile Solids	07/17/06 071706#1	EPA 160.4	Percent	0.01	7.39
N-Ammonia	07/18/06 071806#1	EPA 350.1M	mg-N/kg	2.61	43.6
Sulfide	07/20/06 072006#1	EPA 376.2	mg/kg	20.7	156
Acid Volatile Sulfide	07/19/06 071906#1	EPA 1991	mg/kg	24.3	271
Total Organic Carbon	07/18/06 071806#1	Plumb,1981	Percent	0.020	4.56

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MP
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Client ID: J-4,S-1
ARI ID: 06-12488 JP75E

Analyte	Date	Method	Units	RL	Sample	
pH	07/19/06 071906#1	EPA 150.1	std units	0.01	7.01	
Alkalinity	07/25/06	SM 2320	mgCaCO3/kg	14.3	394	
Total Solids	07/17/06 071706#2	EPA 160.3	Percent	0.01	35.00	
Preserved Total Solids	07/17/06 071706#1	EPA 160.3	Percent	0.01	29.40	
Total Volatile Solids	07/17/06 071706#1	EPA 160.4	Percent	0.01	8.01	
Total Cyanide	07/20/06 072006#1	EPA 335.2	mg/kg	0.707	1.41	
N-Ammonia	07/18/06 071806#1	EPA 350.1M	mg-N/kg	2.91	127	
Nitrate + Nitrite (NO3+NO2)	07/21/06 072106#1	EPA 353.2	mg-N/kg	0.28	< 0.28	U
Total Kjeldahl Nitrogen	07/19/06 071906#1	EPA 351.4	mg-N/kg	1,520	2,730	
Total Phosphorus	07/24/06 072406#1	EPA 365.2	mg/kg	71.4	902	
Sulfide	07/20/06 072006#1	EPA 376.2	mg/kg	26.2	284	
Acid Volatile Sulfide	07/19/06 071906#1	EPA 1991	mg/kg	54.6	464	
Total Organic Carbon	07/18/06 071806#1	Plumb,1981	Percent	0.020	4.67	

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.
NO2+NO3 determined on 2N KCl extracts.

MS/MSD RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MP
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JP75B Client ID: J-1,S-1						
Sulfide	07/20/06	mg/kg	557	3,960	3,190	106.7%
Acid Volatile Sulfide	07/19/06	mg/kg	656	1,210	753	73.6%
Total Organic Carbon	07/18/06	Percent	7.46	12.6	6.87	74.9%
ARI ID: JP75E Client ID: J-4,S-1						
Total Cyanide	07/20/06	mg/kg	1.41	21.9	26.6	77.0%

REPLICATE RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JP75B Client ID: J-1,S-1					
Total Solids	07/17/06	Percent	22.80	22.90 22.80	0.3%
Preserved Total Solids	07/17/06	Percent	16.00	16.10 16.10	0.4%
Total Volatile Solids	07/17/06	Percent	15.40	15.14 15.47	1.1%
Sulfide	07/20/06	mg/kg	557	584	4.7%
Acid Volatile Sulfide	07/19/06	mg/kg	656	692	5.3%
Total Organic Carbon	07/18/06	Percent	7.46	6.36 6.21	10.2%
ARI ID: JP75E Client ID: J-4,S-1					
Total Cyanide	07/20/06	mg/kg	1.41	1.14	21.2%
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	2,730	3,620	28.0%

LAB CONTROL RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/19/06	std units	6.99	7.00	99.9%
Alkalinity	07/25/06	mgCaCO3/kg	120	118	101.7%
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	10.2	10.0	102.0%
Sulfide	07/20/06	mg/kg	129	159	81.3%
Acid Volatile Sulfide	07/19/06	mg/kg	91.4	121	75.5%
Total Organic Carbon	07/18/06	Percent	0.502	0.500	100.4%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P123-506	07/25/06	mgCaCO3/kg	87.2	83.9	103.9%
Total Cyanide EPA #05032	07/20/06	mg/kg	5.50	4.74	116.0%
N-Ammonia SPEX 28-24AS	07/18/06	mg-N/kg	96.6	100	96.6%
Nitrate + Nitrite (NO3+NO2) ERA #20034	07/21/06	mg-N/kg	0.49	0.50	98.0%
Total Phosphorus ERA #02102.1	07/24/06 07/24/06	mg/kg	0.96 4.56	2.00 10.0	48.0% 45.6%
Total Organic Carbon NIST #8704	07/18/06	Percent	3.23	3.35	96.4%

METHOD BLANK RESULTS-CONVENTIONALS
JP75-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Alkalinity	07/25/06	mgCaCO3/kg	< 5.0 U
Total Solids	07/17/06	Percent	< 0.01 U
Preserved Total Solids	07/17/06	Percent	< 0.01 U
Total Volatile Solids	07/17/06	Percent	< 0.01 U
Total Cyanide	07/20/06	mg/kg	< 0.050 U
N-Ammonia	07/18/06	mg-N/kg	< 0.10 U
Nitrate + Nitrite (NO3+NO2)	07/21/06	mg-N/kg	< 0.01 U
Total Kjeldahl Nitrogen	07/19/06	mg-N/kg	< 1.0 U
Total Phosphorus	07/24/06	mg/kg	< 0.16 U
Sulfide	07/20/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/19/06	mg/kg	< 1.00 U
Total Organic Carbon	07/18/06	Percent	< 0.020 U

SAMPLE RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Client ID: C-12,S-2C/3C
ARI ID: 06-12379 JP58C

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#2	EPA 150.1	std units	0.01	6.62
Alkalinity	07/25/06	SM 2320	mgCaCO3/kg	14.8	401
Total Solids	07/17/06 071706#2	EPA 160.3	Percent	0.01	34.00
Preserved Total Solids	07/17/06 071706#1	EPA 160.3	Percent	0.01	35.00
Total Volatile Solids	07/17/06 071706#1	EPA 160.4	Percent	0.01	23.18
N-Ammonia	07/18/06 071806#1	EPA 350.1M	mg-N/kg	5.87	522
Sulfide	07/17/06 071706#1	EPA 376.2	mg/kg	75.0	631
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	58.2	656
Total Organic Carbon	07/19/06 071906#1	Plumb,1981	Percent	0.020	16.2

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Client ID: C-6,S-1
ARI ID: 06-12380 JP58D

Analyte	Date	Method	Units	RL	Sample
pH	07/19/06 071906#2	EPA 150.1	std units	0.01	7.02
Alkalinity	07/25/06	SM 2320	mgCaCO3/kg	20.4	2,450
Total Solids	07/17/06 071706#2	EPA 160.3	Percent	0.01	24.60
Preserved Total Solids	07/17/06 071706#1	EPA 160.3	Percent	0.01	23.40
Total Volatile Solids	07/17/06 071706#1	EPA 160.4	Percent	0.01	12.19
N-Ammonia	07/18/06 071806#1	EPA 350.1M	mg-N/kg	20.8	1,330
Sulfide	07/17/06 071706#1	EPA 376.2	mg/kg	101	1,410
Acid Volatile Sulfide	07/18/06 071806#1	EPA 1991	mg/kg	195	1,990
Total Organic Carbon	07/19/06 071906#1	Plumb,1981	Percent	0.020	8.33

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

MS/MSD RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JP58D Client ID: C-6,S-1						
N-Ammonia	07/18/06	mg-N/kg	1,330	1,660	408	81.0%
N-Ammonia	07/18/06	mg-N/kg	1,330	1,680	415	84.4%
Sulfide	07/17/06	mg/kg	1,410	1,930	654	79.5%
Total Organic Carbon	07/19/06	Percent	8.33	14.4	7.59	80.0%

REPLICATE RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MP
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JP58C Client ID: C-12,S-2C/3C					
pH	07/19/06	std units	6.62	6.65	0.5%
ARI ID: JP58D Client ID: C-6,S-1					
Alkalinity	07/25/06	mgCaCO3/kg	2,450	2,460	0.4%
Total Solids	07/17/06	Percent	24.60	24.60 24.60	0.0%
Preserved Total Solids	07/17/06	Percent	23.40	23.40 23.40	0.0%
Total Volatile Solids	07/17/06	Percent	12.19	12.55 12.51	1.6%
N-Ammonia	07/18/06	mg-N/kg	1,330	1,480 1,330	6.3%
Sulfide	07/17/06	mg/kg	1,410	1,530	8.2%
Total Organic Carbon	07/19/06	Percent	8.33	6.60 6.94	12.6%

LAB CONTROL RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/19/06	std units	6.98	7.00	99.7%
Alkalinity	07/25/06	mgCaCO3/kg	120	118	101.7%
Sulfide	07/17/06	mg/kg	113	128	88.3%
Acid Volatile Sulfide	07/18/06	mg/kg	103	126	81.6%
Total Organic Carbon	07/19/06	Percent	0.516	0.500	103.2%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Alkalinity ERA #P123-506	07/25/06	mgCaCO3/kg	87.2	83.9	103.9%
N-Ammonia SPEX 28-24AS	07/18/06	mg-N/kg	96.6	100	96.6%
Total Organic Carbon NIST #8704	07/19/06	Percent	3.80	3.35	113.4%

METHOD BLANK RESULTS-CONVENTIONALS
JP58-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 07/31/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Alkalinity	07/25/06	mgCaCO3/kg	< 5.0 U
Total Solids	07/17/06	Percent	< 0.01 U
Preserved Total Solids	07/17/06	Percent	< 0.01 U
Total Volatile Solids	07/17/06	Percent	< 0.01 U
N-Ammonia	07/18/06	mg-N/kg	< 0.10 U
Sulfide	07/17/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/18/06	mg/kg	< 1.00 U
Total Organic Carbon	07/19/06	Percent	< 0.020 U

SAMPLE RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Client ID: IG5-S1
ARI ID: 06-11362 JN72A

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	7.31
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	6.4	312
Total Solids	06/27/06 062706#1	EPA 160.3	Percent	0.01	79.00
Preserved Total Solids	06/27/06 062706#1	EPA 160.3	Percent	0.01	73.60
Total Volatile Solids	06/27/06 062706#1	EPA 160.4	Percent	0.01	4.50
N-Ammonia	06/30/06 063006#2	EPA 350.1M	mg-N/kg	0.62	58.9
Sulfide	06/28/06 062806#1	EPA 376.2	mg/kg	22.6	160
Acid Volatile Sulfide	06/28/06 062806#1	EPA 1991	mg/kg	18.7	136
Total Organic Carbon	07/05/06 070506#1	Plumb,1981	Percent	0.020	1.64

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Client ID: IG6-S1
ARI ID: 06-11363 JN72B

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.82
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	15.9	875
Total Solids	06/27/06 062706#1	EPA 160.3	Percent	0.01	32.50
Preserved Total Solids	06/27/06 062706#1	EPA 160.3	Percent	0.01	27.70
Total Volatile Solids	06/27/06 062706#1	EPA 160.4	Percent	0.01	9.48
N-Ammonia	06/30/06 063006#2	EPA 350.1M	mg-N/kg	1.45	129
Sulfide	06/28/06 062806#1	EPA 376.2	mg/kg	58.0	350
Acid Volatile Sulfide	06/28/06 062806#1	EPA 1991	mg/kg	50.6	201
Total Organic Carbon	07/05/06 070506#1	Plumb,1981	Percent	0.020	3.03

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	06/27/06	Percent	< 0.01 U
Preserved Total Solids	06/27/06	Percent	< 0.01 U
Total Volatile Solids	06/27/06	Percent	< 0.01 U
N-Ammonia	06/30/06 06/30/06	mg-N/kg	0.12 0.20
Sulfide	06/28/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	06/28/06	mg/kg	< 1.00 U
Total Organic Carbon	07/05/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/06/06	std units	7.01	7.00	100.1%
Alkalinity	07/10/06	mgCaCO3/kg	120	118	101.7%
Sulfide	06/28/06	mg/kg	150	150	100.0%
Acid Volatile Sulfide	06/28/06	mg/kg	151	150	100.7%
Total Organic Carbon	07/05/06	Percent	0.541	0.500	108.2%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
N-Ammonia SPEX 28-24AS	06/30/06	mg-N/kg	89.5	100	89.5%
Total Organic Carbon NIST #8704	07/05/06	Percent	2.70	3.35	80.6%

REPLICATE RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JN72A Client ID: IG5-S1					
Total Solids	06/27/06	Percent	79.00	78.00 79.90	1.2%
Preserved Total Solids	06/27/06	Percent	73.60	72.80 72.40	0.8%
Total Volatile Solids	06/27/06	Percent	4.50	4.69 4.34	3.9%
N-Ammonia	06/30/06	mg-N/kg	58.9	56.6 59.7	2.8%
Sulfide	06/28/06	mg/kg	160	140	13.3%
Acid Volatile Sulfide	06/28/06	mg/kg	136	126	7.6%
Total Organic Carbon	07/05/06	Percent	1.64	1.54 1.77	7.0%

MS/MSD RESULTS-CONVENTIONALS
JN72-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JN72A Client ID: IG5-S1						
N-Ammonia	06/30/06	mg-N/kg	58.9	175	121	95.6%
N-Ammonia	06/30/06	mg-N/kg	58.9	172	121	93.4%
Sulfide	06/28/06	mg/kg	160	800	670	95.5%
Acid Volatile Sulfide	06/28/06	mg/kg	136	562	552	77.2%
Total Organic Carbon	07/05/06	Percent	1.64	3.73	1.76	118.9%

SAMPLE RESULTS-CONVENTIONALS
JO17-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Client ID: IG2-S1
ARI ID: 06-11567 JO17A

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.76
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	15.0	649
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	33.60
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	28.80
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	9.54
N-Ammonia	06/30/06 063006#2	EPA 350.1M	mg-N/kg	5.94	347
Sulfide	06/30/06 063006#1	EPA 376.2	mg/kg	113	1,440
Acid Volatile Sulfide	06/30/06 063006#1	EPA 1991	mg/kg	47.4	957
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	2.11

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
J017-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	07/05/06	Percent	< 0.01 U
Preserved Total Solids	07/05/06	Percent	< 0.01 U
Total Volatile Solids	07/05/06	Percent	< 0.01 U
N-Ammonia	06/30/06	mg-N/kg	0.12
	06/30/06		0.20
Sulfide	06/30/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	06/30/06	mg/kg	< 1.00 U
Total Organic Carbon	07/07/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
J017-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/06/06	std units	7.01	7.00	100.1%
Alkalinity	07/10/06	mgCaCO3/kg	120	118	101.7%
Sulfide	06/30/06	mg/kg	135	143	94.5%
Acid Volatile Sulfide	06/30/06	mg/kg	126	143	88.2%
Total Organic Carbon	07/07/06	Percent	0.518	0.500	103.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
J017-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
N-Ammonia SPEX 28-24AS	06/30/06	mg-N/kg	89.5	100	89.5%
Total Organic Carbon NIST #8704	07/07/06	Percent	3.21	3.35	95.8%

REPLICATE RESULTS-CONVENTIONALS
J017-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: J017A Client ID: IG2-S1					
pH	07/06/06	std units	6.76	6.81	0.7%
Alkalinity	07/10/06	mgCaCO3/kg	649	647	0.3%
Total Solids	07/05/06	Percent	33.60	33.60 33.50	0.2%
Preserved Total Solids	07/05/06	Percent	28.80	29.00 29.30	0.9%
Total Volatile Solids	07/05/06	Percent	9.54	9.53 9.62	0.5%
Sulfide	06/30/06	mg/kg	1,440	1,430	0.7%
Acid Volatile Sulfide	06/30/06	mg/kg	957	959	0.2%
Total Organic Carbon	07/07/06	Percent	2.11	2.71 2.60	12.9%

MS/MSD RESULTS-CONVENTIONALS
JO17-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JO17A Client ID: IG2-S1						
Sulfide	06/30/06	mg/kg	1,440	2,670	1,620	75.9%
Sulfide	06/30/06	mg/kg	1,440	3,430	1,620	122.8%
Acid Volatile Sulfide	06/30/06	mg/kg	957	1,200	538	45.2%
Acid Volatile Sulfide	06/30/06	mg/kg	957	1,770	990	82.1%
Total Organic Carbon	07/07/06	Percent	2.11	4.50	2.18	109.9%

SAMPLE RESULTS-CONVENTIONALS
JO18-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Client ID: IG1-S1
ARI ID: 06-11570 JO18A

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.48
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	9.3	243
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	54.00
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	63.10
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	10.14
N-Ammonia	06/30/06 063006#2	EPA 350.1M	mg-N/kg	3.56	292
Sulfide	07/05/06 070506#1	EPA 376.2	mg/kg	25.2	344
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	28.4	52.8
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	2.24

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
J018-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Client ID: IG9-S1
ARI ID: 06-11571 J018B

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.50
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	11.9	463
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	42.20
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	33.20
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	11.81
N-Ammonia	06/30/06 063006#2	EPA 350.1M	mg-N/kg	4.57	365
Sulfide	07/05/06 070506#1	EPA 376.2	mg/kg	46.3	631
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	35.0	160
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	1.44

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JO18-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Client ID: IG7-S1
ARI ID: 06-11572 JO18C

Analyte	Date	Method	Units	RL	Sample	
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.82	
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	17.6	709	
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	28.50	
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	23.60	
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	11.32	
Total Cyanide	07/07/06 070706#1	EPA 335.2	mg/kg	0.923	< 0.923	U
N-Ammonia	06/30/06 063006#2	EPA 350.1M	mg-N/kg	8.33	717	
Nitrate + Nitrite (NO3+NO2)	07/05/06 070506#1	EPA 353.2	mg-N/kg	1.71	< 1.71	U
Total Kjeldahl Nitrogen	07/12/06 071206#1	EPA 351.4	mg-N/kg	886	4,170	
Total Phosphorus	07/11/06 071106#1	EPA 365.2	mg/kg	100	1,360	
Sulfide	07/05/06 070506#1	EPA 376.2	mg/kg	67.5	1,000	
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	107	1,410	
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	3.45	

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.
NO2+NO3 determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
J018-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	07/05/06	Percent	< 0.01 U
Preserved Total Solids	07/05/06	Percent	< 0.01 U
Total Volatile Solids	07/05/06	Percent	< 0.01 U
Total Cyanide	07/07/06	mg/kg	< 0.050 U
N-Ammonia	06/30/06 06/30/06	mg-N/kg	0.12 0.20
Nitrate + Nitrite (NO3+NO2)	07/05/06	mg-N/kg	< 0.01 U
Total Kjeldahl Nitrogen	07/12/06	mg-N/kg	< 2.0 U
Total Phosphorus	07/11/06	mg/kg	< 0.16 U
Sulfide	07/05/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/06/06	mg/kg	< 1.00 U
Total Organic Carbon	07/07/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
J018-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/06/06	std units	7.01	7.00	100.1%
Alkalinity	07/10/06	mgCaCO3/kg	120	118	101.7%
Total Kjeldahl Nitrogen	07/12/06	mg-N/kg	4.4	5.0	88.0%
Sulfide	07/05/06	mg/kg	125	157	79.6%
Acid Volatile Sulfide	07/06/06	mg/kg	148	152	97.1%
Total Organic Carbon	07/07/06	Percent	0.518	0.500	103.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
J018-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Cyanide EPA #05032	07/07/06	mg/kg	6.10	4.89	124.7%
N-Ammonia SPEX 28-24AS	06/30/06	mg-N/kg	89.5	100	89.5%
Nitrate + Nitrite (NO3+NO2) ERA #20034	07/05/06	mg-N/kg	0.52	0.50	104.0%
Total Phosphorus ERA #02102.1	07/11/06	mg/kg	0.94	1.00	94.0%
Total Organic Carbon NIST #8704	07/07/06	Percent	3.21	3.35	95.8%

REPLICATE RESULTS-CONVENTIONALS
JO18-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JO18A Client ID: IG1-S1					
Sulfide	07/05/06	mg/kg	344	348	1.2%
Acid Volatile Sulfide	07/06/06	mg/kg	52.8	126	81.9%
Total Organic Carbon	07/07/06	Percent	2.24	2.25 2.12	3.3%
ARI ID: JO18B Client ID: IG9-S1					
Total Solids	07/05/06	Percent	42.20	42.50 42.40	0.4%
Preserved Total Solids	07/05/06	Percent	33.20	33.20 33.90	1.2%
Total Volatile Solids	07/05/06	Percent	11.81	11.41 11.08	3.2%
ARI ID: JO18C Client ID: IG7-S1					
Total Cyanide	07/07/06	mg/kg	< 0.923	< 0.914	NA
Nitrate + Nitrite (NO3+NO2)	07/05/06	mg-N/kg	< 1.71	< 1.72	NA
Total Kjeldahl Nitrogen	07/12/06	mg-N/kg	4,170	3,760	10.3%
Total Phosphorus	07/11/06	mg/kg	1,360	1,340 1,340	0.9%

MS/MSD RESULTS-CONVENTIONALS
JO18-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JO18A Client ID: IG1-S1						
Sulfide	07/05/06	mg/kg	344	736	400	98.0%
Acid Volatile Sulfide	07/06/06	mg/kg	52.8	592	451	119.6%
Total Organic Carbon	07/07/06	Percent	2.24	4.60	2.15	109.7%
ARI ID: JO18C Client ID: IG7-S1						
Total Cyanide	07/07/06	mg/kg	< 0.923	20.1	26.0	77.3%
Nitrate + Nitrite (NO3+NO2)	07/05/06	mg-N/kg	< 1.71	292	344	84.9%
Total Kjeldahl Nitrogen	07/12/06	mg-N/kg	4,170	20,900	21,000	79.6%
Total Phosphorus	07/11/06	mg/kg	1,360	14,000	13,500	93.7%
Total Phosphorus	07/11/06	mg/kg	1,360	12,300	11,700	93.5%

SAMPLE RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Client ID: IG3-S1
ARI ID: 06-11676 JO43A

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	7.04
Alkalinity	07/11/06	SM 2320	mgCaCO3/kg	20.3	1,230
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	25.00
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	26.40
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	11.61
N-Ammonia	07/03/06 070306#2	EPA 350.1M	mg-N/kg	7.82	759
Sulfide	07/03/06 070306#1	EPA 376.2	mg/kg	118	2,100
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	131	1,560
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	4.42

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Client ID: IG8-S1
ARI ID: 06-11677 JO43B

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.91
Alkalinity	07/11/06	SM 2320	mgCaCO3/kg	20.6	1,400
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	24.70
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	24.60
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	11.84
N-Ammonia	07/03/06 070306#2	EPA 350.1M	mg-N/kg	15.7	816
Sulfide	07/03/06 070306#1	EPA 376.2	mg/kg	134	2,700
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	132	1,560
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	3.53

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

SAMPLE RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Client ID: IG4-S1
ARI ID: 06-11678 JO43C

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	7.05
Alkalinity	07/11/06	SM 2320	mgCaCO3/kg	20.1	1,700
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	25.10
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	26.20
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	11.21
N-Ammonia	07/03/06 070306#2	EPA 350.1M	mg-N/kg	7.75	663
Sulfide	07/03/06 070306#1	EPA 376.2	mg/kg	127	1,800
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	131	1,770
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	3.76

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	07/05/06	Percent	< 0.01 U
Preserved Total Solids	07/05/06	Percent	< 0.01 U
Total Volatile Solids	07/05/06	Percent	< 0.01 U
N-Ammonia	07/03/06	mg-N/kg	< 0.10 U
	07/03/06		< 0.10 U
Sulfide	07/03/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/06/06	mg/kg	< 1.00 U
Total Organic Carbon	07/07/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/06/06	std units	7.01	7.00	100.1%
Alkalinity	07/11/06	mgCaCO3/kg	120	118	101.7%
Sulfide	07/03/06	mg/kg	160	159	100.9%
Acid Volatile Sulfide	07/06/06	mg/kg	148	152	97.1%
Total Organic Carbon	07/07/06	Percent	0.518	0.500	103.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
N-Ammonia	07/03/06	mg-N/kg	98.7	100	98.7%
SPEX 28-24AS	07/03/06		93.5	100	93.5%
Total Organic Carbon NIST #8704	07/07/06	Percent	3.21	3.35	95.8%

REPLICATE RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JO43A Client ID: IG3-S1					
Alkalinity	07/11/06	mgCaCO3/kg	1,230	1,230	0.0%
N-Ammonia	07/03/06	mg-N/kg	759	757	0.3%
Sulfide	07/03/06	mg/kg	2,100	2,100	0.0%
Total Organic Carbon	07/07/06	Percent	4.42	4.75 4.84	4.7%

MS/MSD RESULTS-CONVENTIONALS
JO43-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JO43A Client ID: IG3-S1						
N-Ammonia	07/03/06	mg-N/kg	759	1,110	392	89.5%
N-Ammonia	07/03/06	mg-N/kg	759	1,120	392	92.1%
Sulfide	07/03/06	mg/kg	2,100	3,800	1,900	89.5%
Total Organic Carbon	07/07/06	Percent	4.42	9.88	4.36	125.1%

SAMPLE RESULTS-CONVENTIONALS
JO60-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Client ID: C3-S1
ARI ID: 06-11771 JO60A

Analyte	Date	Method	Units	RL	Sample
pH	07/06/06 070606#1	EPA 150.1	std units	0.01	6.94
Alkalinity	07/10/06	SM 2320	mgCaCO3/kg	20.8	1,440
Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	24.40
Preserved Total Solids	07/05/06 070506#1	EPA 160.3	Percent	0.01	24.20
Total Volatile Solids	07/05/06 070506#1	EPA 160.4	Percent	0.01	11.54
N-Ammonia	07/05/06 070506#1	EPA 350.1M	mg-N/kg	8.16	628
Sulfide	07/05/06 070506#1	EPA 376.2	mg/kg	33.5	121
Acid Volatile Sulfide	07/06/06 070606#1	EPA 1991	mg/kg	6.46	< 6.46 U
Total Organic Carbon	07/07/06 070706#1	Plumb,1981	Percent	0.020	3.44

RL Analytical reporting limit
U Undetected at reported detection limit

pH determined on 1:1 soil:D.I. water extracts.
Ammonia determined on 2N KCl extracts.

METHOD BLANK RESULTS-CONVENTIONALS
JO60-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	07/05/06	Percent	< 0.01 U
Preserved Total Solids	07/05/06	Percent	< 0.01 U
Total Volatile Solids	07/05/06	Percent	< 0.01 U
N-Ammonia	07/05/06	mg-N/kg	0.14
Sulfide	07/05/06	mg/kg	< 1.00 U
Acid Volatile Sulfide	07/06/06	mg/kg	< 1.00 U
Total Organic Carbon	07/07/06	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
JO60-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
pH	07/06/06	std units	7.01	7.00	100.1%
Alkalinity	07/10/06	mgCaCO3/kg	120	118	101.7%
Sulfide	07/05/06	mg/kg	125	157	79.6%
Acid Volatile Sulfide	07/06/06	mg/kg	148	152	97.1%
Total Organic Carbon	07/07/06	Percent	0.518	0.500	103.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JO60-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
N-Ammonia SPEX 28-24AS	07/05/06	mg-N/kg	103	100	103.0%
Total Organic Carbon NIST #8704	07/07/06	Percent	3.21	3.35	95.8%

REPLICATE RESULTS-CONVENTIONALS
JO60-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JO60A Client ID: C3-S1					
N-Ammonia	07/05/06	mg-N/kg	628	632	0.6%

MS/MSD RESULTS-CONVENTIONALS
JO60-G & G Associates

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JO60A Client ID: C3-S1						
N-Ammonia	07/05/06	mg-N/kg	628	1,010	406	94.1%
N-Ammonia	07/05/06	mg-N/kg	628	1,010	406	94.1%

Dioxins

FRONTIER
ANALYTICAL LABORATORY

August 4, 2006

FAL Project ID: 3956

Mr. Mark Harris
Analytical Resources Incorporated
4611 South 134th Place
Tukwila, WA 98168-3240

Dear Mr. Harris,

Enclosed are the results for Frontier Analytical Laboratory project **3956**. This corresponds to your **Klamath River Sediment Study** project. The one sediment sample received on 7/7/2006 was extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. Analytical Resources Incorporated requested a turnaround time of fifteen business days for project **3956**. The original Level I report was completed and reported on July 31, 2006. On August 2, 2006 we received an email request for a Level IV data package and Frontier Analytical Laboratory's standard electronic data deliverables (EDDs).

The following level IV report consists of an Analytical Data section, a Sample Receipt section, a Laboratory Raw Data section, and an Instrument Raw Data section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your original chain of custody, our sample login form and a sample photo. The Laboratory Raw Data section contains our project request sheet, a percent solids sheet, an extraction bench sheet, and the cleanup bench sheet. The instrument raw data section contains three sub-sections; the sample results section, the initial calibration section and the continuing/ending calibration section. The sample results sub-section consists of the quantitation summary forms with chromatograms for all samples and QC. The initial calibration sub-section consists of the individual quantitation summary forms and chromatograms for each point of the initial calibration curve as well as an overall quantitation summary form of the initial calibration curve. The continuing/ending calibration sub-section consists of the quantitation summary forms and chromatograms for all beginning and ending calibration injections associated with the samples and QC. The EDD has been sent to you via email.

If you have any questions regarding project **3956**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

FRONTIER ANALYTICAL LABORATORY
5172 Hillsdale Circle • El Dorado Hills, CA 95762
Tel (916) 934-0900 • Fax (916) 934-0999
www.frontieranalytical.com

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **3956**

Received on: **07/07/2006** Project Due: **07/31/2006** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time
3956-001-SA	1	Klamath River SS	IG7-S1	EPA 1613 D/F	Sediment	06/27/2006	02:50 pm

FAL Sample ID	Notes
3956-001-SA	Sample was initially put on hold pending receipt of other Klamath River sediment study samples.

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 3956-001-MB
Client ID: Method Blank
Matrix: Sediment
Batch No: X0913

Date Extracted: 07-24-2006
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL3-7-5-06
GC Column: DB5
Units: pg/g

Acquired: 07-25-2006
WHO TEQ: 0.00

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.0616		-	0.0435				
1,2,3,7,8-PeCDD	ND	0.0630		-	0.0665				
1,2,3,4,7,8-HxCDD	ND	0.166		-	0.107				
1,2,3,6,7,8-HxCDD	ND	0.176		-	0.110	Total TCDD	ND	0.0616	
1,2,3,7,8,9-HxCDD	ND	0.200		-	0.126	Total PeCDD	ND	0.0630	
1,2,3,4,6,7,8-HpCDD	ND	0.0898		-	0.104	Total HxCDD	ND	0.200	
OCDD	ND	0.403		-	0.246	Total HpCDD	ND	0.0898	
2,3,7,8-TCDF	ND	0.0483		-	0.0467				
1,2,3,7,8-PeCDF	ND	0.0955		-	0.0794				
2,3,4,7,8-PeCDF	ND	0.0950		-	0.0748				
1,2,3,4,7,8-HxCDF	ND	0.0569		-	0.0719				
1,2,3,6,7,8-HxCDF	ND	0.0609		-	0.0771				
2,3,4,6,7,8-HxCDF	ND	0.0587		-	0.0746				
1,2,3,7,8,9-HxCDF	ND	0.0487		-	0.0863	Total TCDF	ND	0.0483	
1,2,3,4,6,7,8-HpCDF	ND	0.0652		-	0.0676	Total PeCDF	ND	0.0955	
1,2,3,4,7,8,9-HpCDF	ND	0.0680		-	0.0847	Total HxCDF	ND	0.0609	
OCDF	ND	0.238		-	0.249	Total HpCDF	ND	0.0682	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	94.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	85.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	92.8	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	87.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	103	23.0 - 140	
13C-OCDD	108	17.0 - 157	
13C-2,3,7,8-TCDF	99.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	86.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	84.0	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	84.3	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	83.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	86.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	94.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	90.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	119	26.0 - 138	
13C-OCDF	109	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	96.1	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: [signature]
Date: 7/31/06

Reviewed By: DAJ
Date: 7/31/06

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 3956-001-OPR
Client ID: OPR
Matrix: Sediment
Batch No: X0913

Date Extracted: 07-24-2006
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL3-7-5-06
GC Column: DB5
Units: ng/ml

Acquired: 07-25-2006
WHO TEQ: NA

Compound	Conc	QC Limits
2,3,7,8-TCDD	8.19	6.70 - 15.8
1,2,3,7,8-PeCDD	45.7	35.0 - 71.0
1,2,3,4,7,8-HxCDD	48.0	35.0 - 82.0
1,2,3,6,7,8-HxCDD	47.8	38.0 - 67.0
1,2,3,7,8,9-HxCDD	48.4	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	47.9	35.0 - 70.0
OCDD	93.0	78.0 - 144
2,3,7,8-TCDF	8.52	7.50 - 15.8
1,2,3,7,8-PeCDF	48.4	40.0 - 67.0
2,3,4,7,8-PeCDF	48.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	49.7	36.0 - 67.0
1,2,3,6,7,8-HxCDF	49.3	42.0 - 65.0
2,3,4,6,7,8-HxCDF	48.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	48.8	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	49.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	48.9	39.0 - 69.0
OCDF	97.6	63.0 - 170

Internal Standards	% Rec	QC Limits
13C-2,3,7,8-TCDD	102	20.0 - 175
13C-1,2,3,7,8-PeCDD	89.4	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	93.7	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	94.2	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	111	26.0 - 166
13C-OCDD	110	13.0 - 198
13C-2,3,7,8-TCDF	103	22.0 - 152
13C-1,2,3,7,8-PeCDF	90.5	21.0 - 192
13C-2,3,4,7,8-PeCDF	88.7	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	88.8	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	89.9	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	91.2	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	101	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	122	20.0 - 186
13C-OCDF	111	13.0 - 198

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	96.8	31.0 - 191

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: [signature]
Date: 7/31/06

Reviewed By: DPJ
Date: 7/31/06

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 3956-001-SA	Date Extracted: 07-24-2006	ICal: PCDDFAL3-7-5-06	Acquired: 07-27-2006
Client ID: IG7-S1	Date Received: 07-07-2006	GC Column: DB5	WHO TEQ: 2.20
Matrix: Sediment	Amount: 10.11 g	Units: pg/g	
Batch No: X0913	% Solids: 28.70		

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.0776		-	0.0435				
1,2,3,7,8-PeCDD	0.347	-	J	0.347	0.0665				
1,2,3,4,7,8-HxCDD	0.919	-	J	0.0919	0.107				
1,2,3,6,7,8-HxCDD	2.69	-		0.269	0.110	Total TCDD	0.842	-	
1,2,3,7,8,9-HxCDD	2.24	-	J	0.224	0.126	Total PeCDD	4.00	-	
1,2,3,4,6,7,8-HpCDD	51.7	-		0.517	0.104	Total HxCDD	26.6	-	
OCDD	413	-		0.0413	0.246	Total HpCDD	106	-	
2,3,7,8-TCDF	0.390	-	J	0.0390	0.0467				
1,2,3,7,8-PeCDF	0.348	-	J	0.0174	0.0794				
2,3,4,7,8-PeCDF	0.285	-	J	0.142	0.0748				
1,2,3,4,7,8-HxCDF	1.10	-	J	0.110	0.0719				
1,2,3,6,7,8-HxCDF	0.925	-	J	0.0925	0.0771				
2,3,4,6,7,8-HxCDF	0.986	-	J	0.0986	0.0746				
1,2,3,7,8,9-HxCDF	ND	0.158		-	0.0863	Total TCDF	5.74	-	
1,2,3,4,6,7,8-HpCDF	18.9	-		0.189	0.0676	Total PeCDF	6.63	-	
1,2,3,4,7,8,9-HpCDF	1.18	-	J	0.0118	0.0847	Total HxCDF	16.6	-	
OCDF	44.7	-		0.00447	0.249	Total HpCDF	49.9	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	104	25.0 - 164	
13C-1,2,3,7,8-PeCDD	93.9	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	99.6	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	106	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	99.4	23.0 - 140	
13C-OCDD	102	17.0 - 157	
13C-2,3,7,8-TCDF	113	24.0 - 169	
13C-1,2,3,7,8-PeCDF	101	24.0 - 185	
13C-2,3,4,7,8-PeCDF	99.7	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	94.8	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	97.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	101	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	101	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	86.6	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	110	26.0 - 138	
13C-OCDF	98.0	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	109	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: JC

Date: 7/31/06

Reviewed By: DN

Date: 7/31/06

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SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 07/06/06

ANALYTICAL RESOURCES INCORPORATED

3956 11

ARI Project: JO18

Laboratory: Frontier Analytical Laboratory
Lab Contact: DALE VICKERS
Lab Address: 5172 Hillsdale Circle
El Dorado Hills, CA 95762
Phone: 916-934-0900
Fax: 916-934-0999

ARI Client: G & G Associates
Project ID: KLAMATH RIVER SEDIMENT STUDY
ARI PM: Mark Harris
Phone: 206-695-6210
Fax: 206-695-6201

Analytical Protocol: PSDDA
Special Instructions:

Requested Turn Around:
Fax Results (Y/N): **Yes**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID / Add'l ID	Sampled	Matrix	Bottles	Analyses
06-11572-JO18C	IG7-S1	06/27/06	Sediment	2	Dioxin-High Res (Sub) DIOXINS 1613

Special Instructions: None

Mark to Kathy;
Use "Client ID" for Sample ID. KZ 7/18/06

Carrier		Airbill		Date
UPS		1Z 832 695 13 4249 7385		
Relinquished by	Company	Date	Time	
	ARI	7/6/06	16:00	
Received by	Company	Date	Time	
	FAL	7/7/06	1145	

Subcontractor Custody Form - JO18
Page 1 of 1

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **3956**

Client:	Analytical Resources Incorporated
Client Project ID:	Klamath River SS
Date Received:	07/07/2006
Time Received:	11:45 am
Received By:	NM
Logged In By:	GN
# of Samples Received:	1
Duplicates:	1
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1Z8326951342497385
Shipping Container Received Intact	Yes
Custody seals(s) present?	Yes
Custody seals(s) intact?	Yes
Sample Arrival Temperature (C)	11
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	06/27/2007
Adequate Sample Volume	Yes

Anomalies or additional comments:

Sample was received at a temperature of eleven degrees celsius which is out of the method recommended temperature receipt range of zero to four degrees celcius. Client was notified by e-mail on 7/7/2006 of this anomaly. DPV 7/31/06

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UBCONTRACTOR ANALYSIS REQUEST
USTODY TRANSFER 07/06/06

ANALYTICAL RESOURCES INCORPORATED

ARI Project

aboratory: Frontier Analytical Laboratory
Contact: DALE VICKERS
ddress: 5172 Hillsdale Circle
do Hills, CA 95762
16-934-0900
-934-0999

ARI Client: G & G Associates
Project ID: KLAMATH RIVER SEDIMENT STU
ARI PM: Mark Harris
Phone: 206-695-6210
Fax: 206-695-6201

l Protocol: PSDDA
nstructions:

Requested Turn Around:
Fax Results (Y/N): Yes

Liability. Subcontractor is expected to perform all requested services
ance with appropriate methodology following Standard Operating Procedures
standards for the industry. The total liability of ARI, its officers,
mployees, or sucessors, arising out of or in connection with the requested
shall not exceed the negotiated amount for said services. The agreement
bcontractor to perform services requested by ARI releases ARI from any
ing any provision to the contrary in any
ement between ARI and the Subcontractor.

	...led	Matrix	Bottles	Analyses
	7/06	Sediment	2	Dioxin-High Res (S DIOXINS 1613

Frontier Analytical Laboratory
3956-001-SA
Client ID:IG7-S1
Storage: R1 (01 of 02)
Client: SKW
Sample IG7-S1
Date 6/27/06 Time
Analysis Dioxins
Comments:

Sample ID. IG2
7/18/06

Frontier Analytical Laboratory
3956-001-SA
Client ID:IG7-S1
Storage: R1 (02 of 02)
Client: SKW
Sample IG7-S1
Date 6/27/06 Time
Analysis Dioxins
Comments:

Airbill
12 872 675 13 6249 9115

Date

ed by
Company
Date

2006/07/18

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FRONTIER ANALYTICAL LABORATORY

PROJECT REQUEST SHEET

Project #: 3956 Sample #: 1 Client BS

Client: Analytical Resources Storage: R1 Hold Time: 06/27/2007

Matrix: Sediment Extraction ~~0905~~ 0913 Due Date: 07/31/2006

Method: EPA 1613 D/F

COMMENTS/INSTRUCTIONS:

MB & OPR also for:
3963-1→3
3967-1
3968-1-4
3969-2,4x

Results: 3956-1

Instrument:
DB5 FAL-3
DB225 ____
DB1 ____

"HOTTER THAN HELL!"

STD's: ~~3969 2x~~ 3963

Percent Solids

FAL Project: 3956

	Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids	10g Equiv
1.18	3956-001-0001-SA	GN	7/10/06	9.33	2.68	28.72	34.81

% Solids Summary:

Non-Filtered Determination

1. Place an aliquot of sample into a pre-weighed aluminum weighing boat. Use approximately two to ten grams for solid samples, approximately 10 mL for aqueous samples.
2. Record the weight.
3. Dry sample overnight at approximately 110 C.

Filtered Determination

1. Pre-weigh a glass fiber filter of appropriate pore size and pressure filter a sample aliquot (200-1000mL) through it.
2. Air dry the filter and record the dry weight.

% Solids calculation

% solids = aliquot after drying/aliquot before drying x 100

- Samples containing one percent solids or less are prepared as aqueous samples.
- Samples containing greater than one percent solids prepared as solid samples.

EXTRACTION SHEET

Project #: 3956 Extraction Date: 2006-07-24 Extraction Chemist: NM

Method/Analysis: EPA 1613 D/F

Procedure: SOX/SDS Solvent: Toluene

Sample ID	Wet wt. (g/L)	Dry wt. (g/L)	IS Amt: 10.0uL ID: 051212A Vial: 4 Chemist/Witness/Date	NS Amt: 10.0uL ID: 051212B Vial: 2 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 051212C Vial: 3 Chemist/Witness/Date
0913-001-0001-MB	(10g)	(10g)	[illegible] / pN / 7/24/06		GN [illegible] 7/25/06
0913-001-0001-OPR	↓	↓	↓	[illegible] / pN / 7/24/06	↓
3956-001-0001-SA	35.22	~~12.26~~ 10.11 s pN 7/31/06			

Comments:

CLEANUP SHEET

Project #: 3956

Method/Analysis: EPA 1613 D/F

Splits: 0 Split Date: N/A Final Volume: 20.0uL

Sample ID	Cleanup 1	Cleanup 2	Cleanup 3	RS
	ABP	MSG /ACID ALUMINA	charcoal	Amt: 10.0uL ID: 051212 Vial: 3
	Chemist/Date	Chemist/Date	Chemist/Date	Chemist/Witness/Date
0913-001-0001-MB	GN 7/25/06	↑	/7/25/06	DN /7/25/06
0913-001-0001-OPR	↓		↓	↓
3956-001-0001-SA	N/A	GN 7/25/06		

Comments:

FAL ID: 0913-001-0001-MB Filename: 25JUL06M Sam:6 Acquired: 25-JUL-06 19:25:45 ICal: PCDDFAL3-7-5-06
Client ID: Method Blank ConCal: ST072506M1 EndCal: ST072506M2
Results: 0913 GC Column: DB5 Amount: 10.00 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00

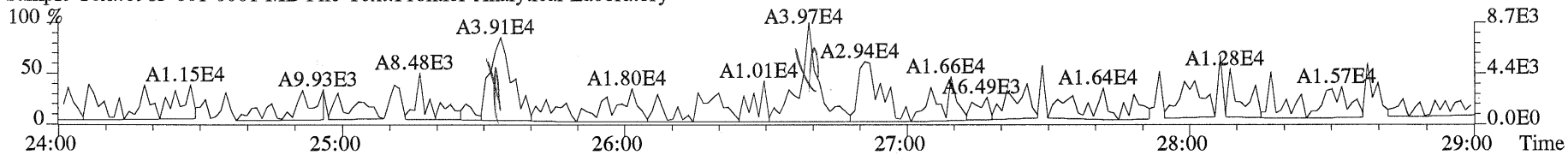
Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	*	*	n	NotFnd	1.10	*		2.50	3530	0.0616	
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.90	*		2.50	1630	0.0630	
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	0.96	*		2.50	3580	0.166	
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	0.83	*		2.50	3580	0.176	
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	0.77	*		2.50	3580	0.200	
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	0.86	*		2.50	2130	0.0898	
OCDD	*	*	n	NotFnd	0.87	*		2.50	6700	0.403	
2,3,7,8-TCDF	*	*	n	NotFnd	0.99	*		2.50	3830	0.0483	
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.80	*		2.50	3300	0.0955	
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.88	*		2.50	3300	0.0950	
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.42	*		2.50	2320	0.0569	
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.97	*		2.50	2320	0.0609	
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	1.26	*		2.50	2320	0.0587	
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.34	*		2.50	2320	0.0487	
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.28	*		2.50	2650	0.0652	
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.22	*		2.50	2650	0.0680	
OCDF	*	*	n	NotFnd	0.90	*		2.50	4860	0.238	

							Rec
13C-2,3,7,8-TCDD	1.91e+08	0.77	y	27:23	1.00	189	94.4
13C-1,2,3,7,8-PeCDD	1.67e+08	1.57	y	33:11	0.96	172	85.8
13C-1,2,3,4,7,8-HxCDD	1.26e+08	1.28	y	38:32	0.90	186	92.8
13C-1,2,3,6,7,8-HxCDD	1.42e+08	1.28	y	38:42	1.09	174	87.2
13C-1,2,3,4,6,7,8-HpCDD	1.48e+08	1.05	y	44:07	0.96	206	103
13C-OCDD	2.32e+08	0.90	y	49:39	0.71	433	108
13C-2,3,7,8-TCDF	2.73e+08	0.79	y	26:38	0.94	199	99.7
13C-1,2,3,7,8-PeCDF	2.53e+08	1.59	y	31:28	1.00	173	86.3
13C-2,3,4,7,8-PeCDF	2.32e+08	1.59	y	32:47	0.94	168	84.0
13C-1,2,3,4,7,8-HxCDF	1.09e+08	0.52	y	37:09	0.86	169	84.3
13C-1,2,3,6,7,8-HxCDF	1.54e+08	0.52	y	37:21	1.23	167	83.3
13C-2,3,4,6,7,8-HxCDF	1.15e+08	0.52	y	38:18	0.88	173	86.5
13C-1,2,3,7,8,9-HxCDF	1.40e+08	0.51	y	39:43	0.98	189	94.6
13C-1,2,3,4,6,7,8-HpCDF	1.18e+08	0.45	y	42:13	0.86	182	90.9
13C-1,2,3,4,7,8,9-HpCDF	1.25e+08	0.44	y	45:01	0.70	238	119
13C-OCDF	2.69e+08	0.90	y	50:01	0.82	437	109
37Cl-2,3,7,8-TCDD	6.32e+07			27:25	0.81	76.9	96.1
13C-1,2,3,4-TCDD	2.03e+08	0.79	y	26:49	-	10.6	
13C-1,2,3,4-TCDF	2.93e+08	0.77	y	25:34	-	10.2	
13C-1,2,3,7,8,9-HxCDD	1.50e+08	1.26	y	39:09	-	10.1	

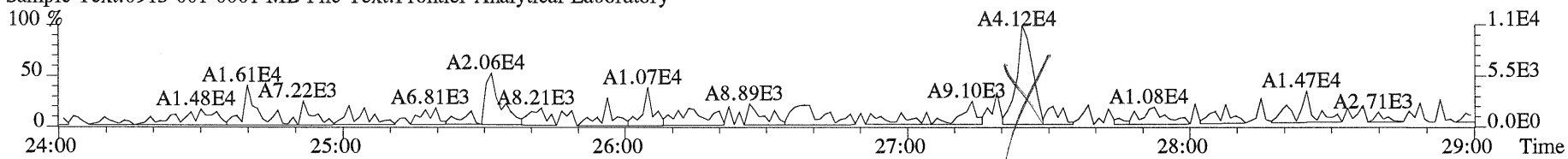
			Fac	Noise	DL	#Hom	
Total Tetra-Dioxins	*	NotFnd 1.10	*	2.50	3530	0.0616	0	
Total Penta-Dioxins	*	NotFnd 0.90	*	2.50	1630	0.0630	0	
Total Hexa-Dioxins	*	NotFnd 0.85	*	2.50	3580	0.200	0	
Total Hepta-Dioxins	*	NotFnd 0.86	*	2.50	2130	0.0898	0	
Total Tetra-Furans	*	NotFnd 0.99	*	2.50	3830	0.0483	0	
1st Fn. Tot Penta-Furans	*	NotFnd 0.84	*	2.50	3300	0.0955	0	PeCDF
Total Penta-Furans	*	NotFnd 0.84	*	2.50	3300	0.0955	0	*
Total Hexa-Furans	*	NotFnd 1.22	*	2.50	2320	0.0609	0	
Total Hepta-Furans	*	NotFnd 1.25	*	2.50	2650	0.0682	0	

Analyst: K Date: 7/26/06

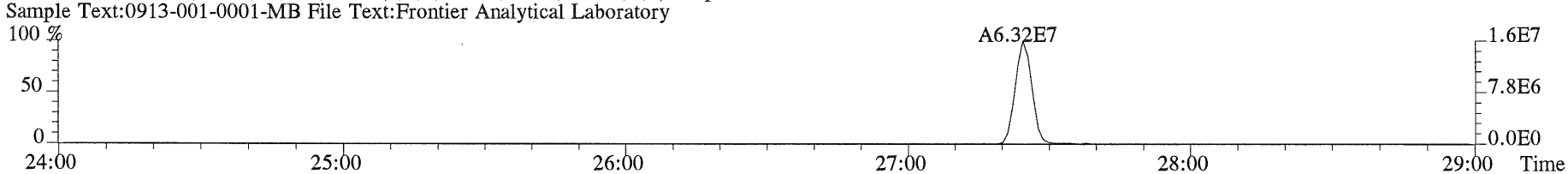
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



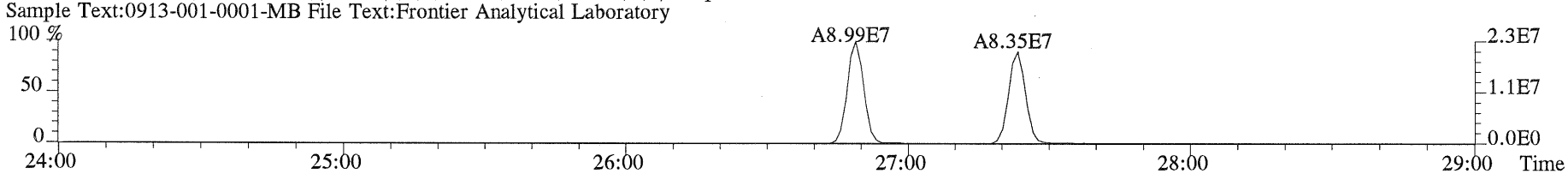
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



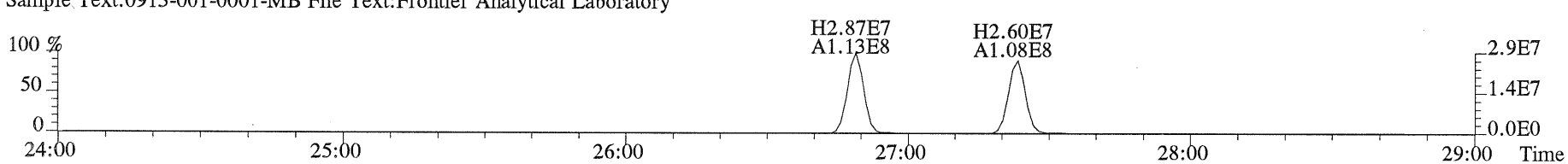
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



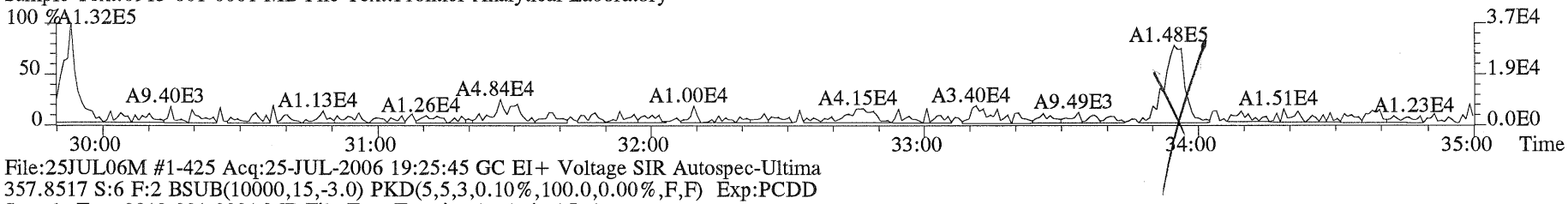
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



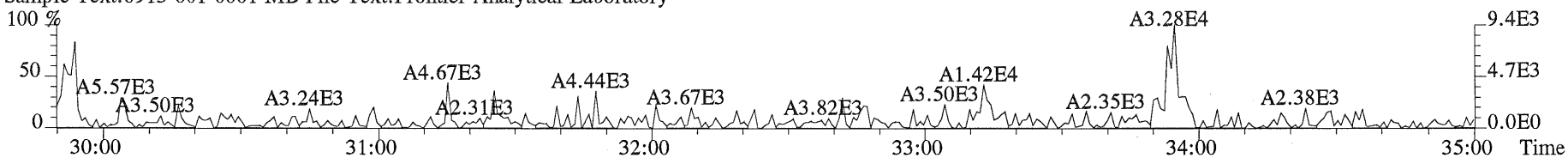
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



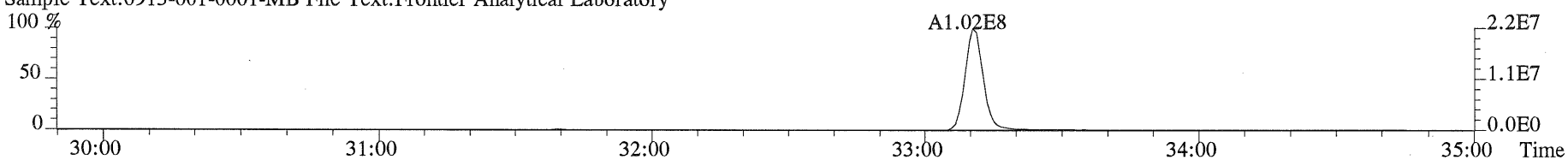
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



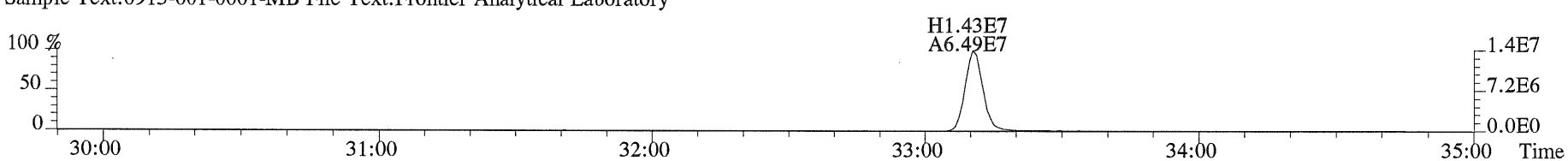
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



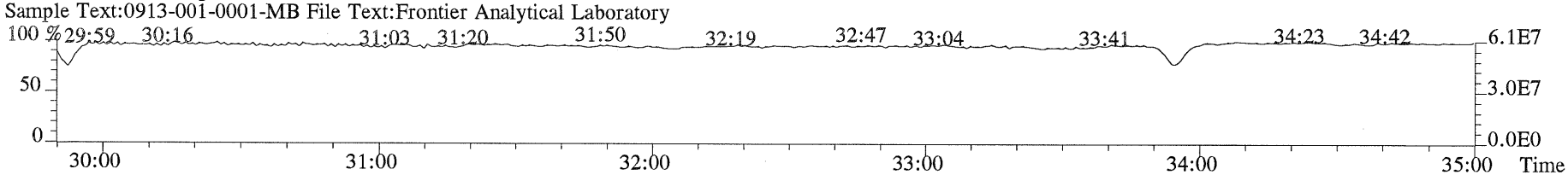
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



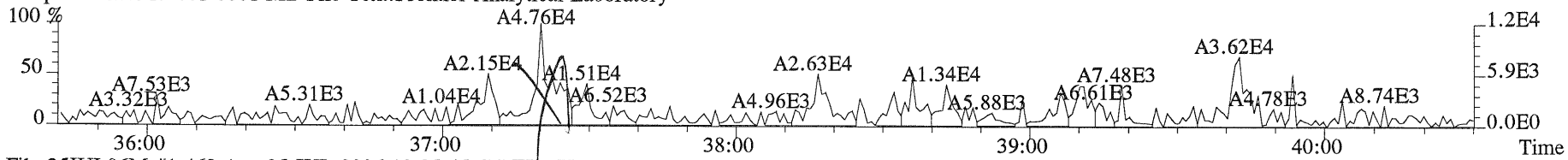
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



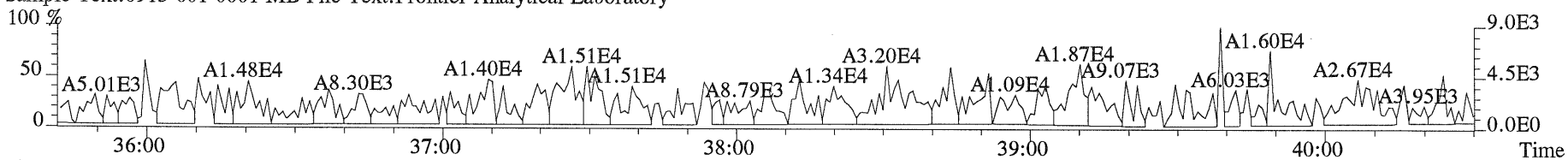
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



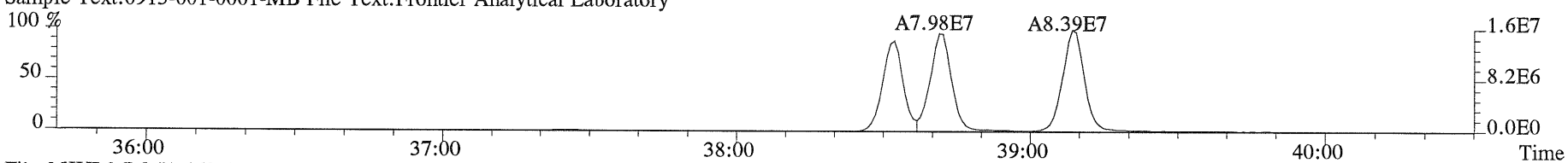
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



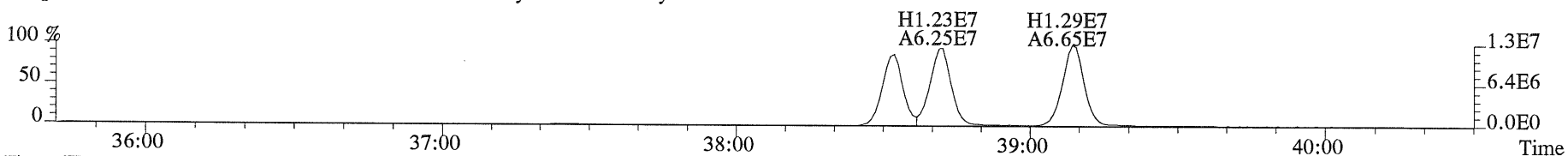
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



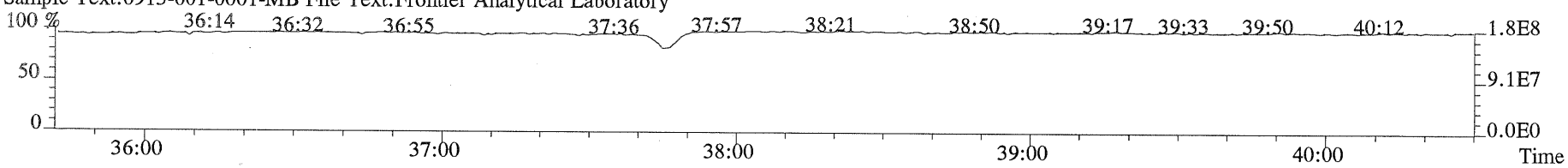
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



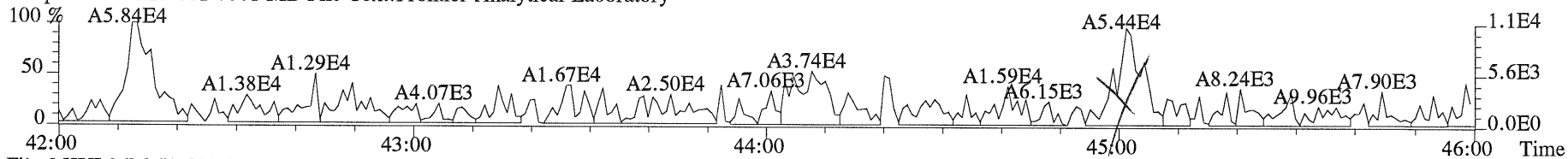
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



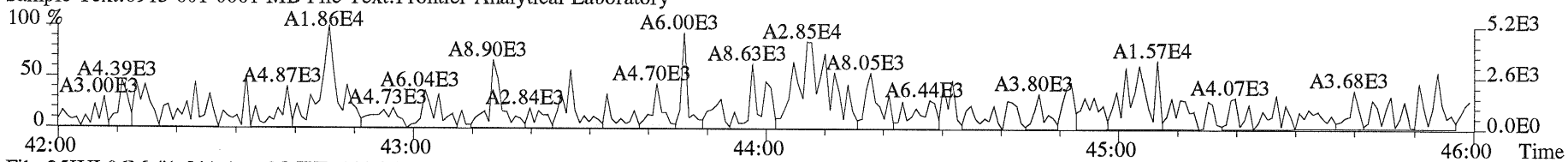
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



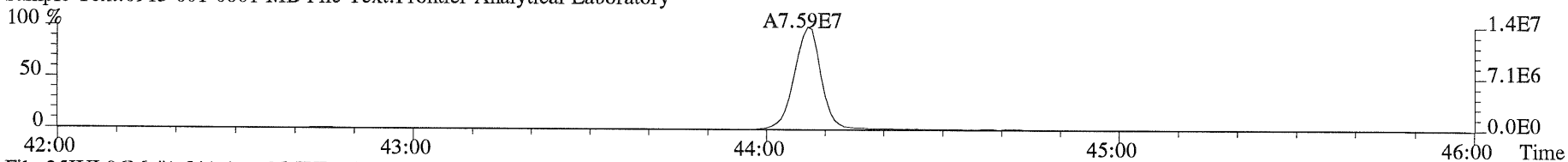
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



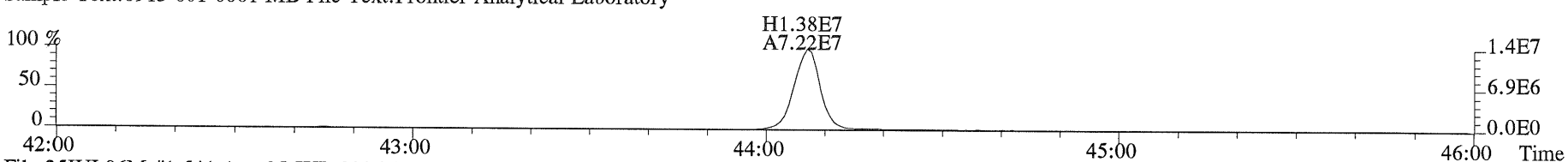
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



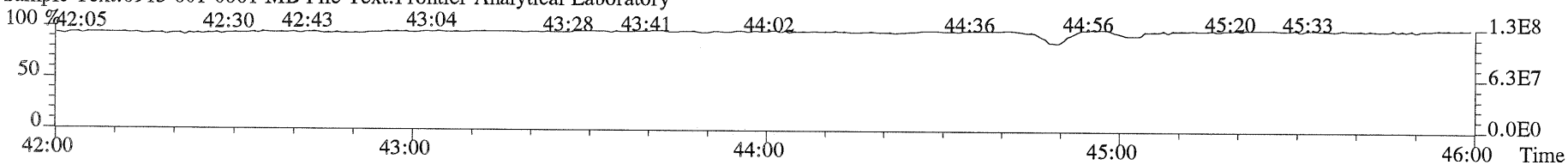
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



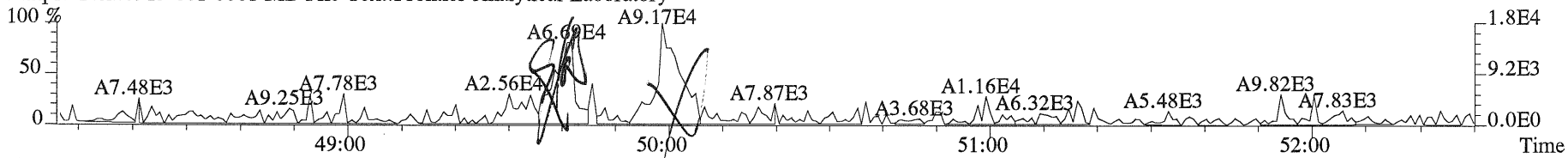
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



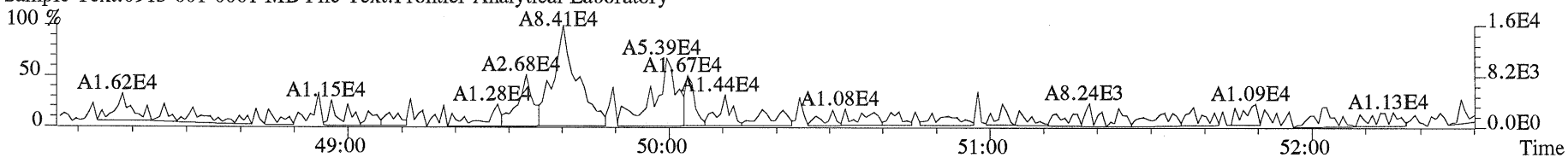
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



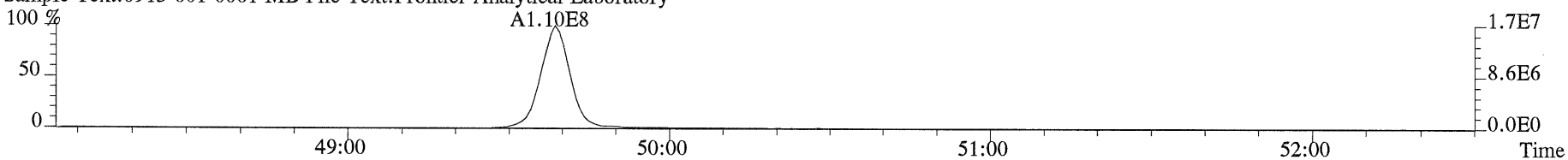
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



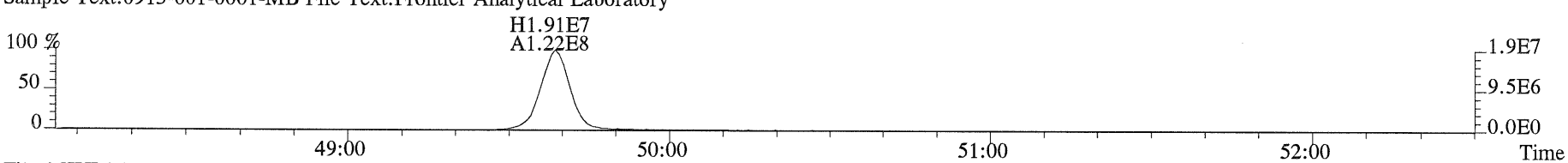
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



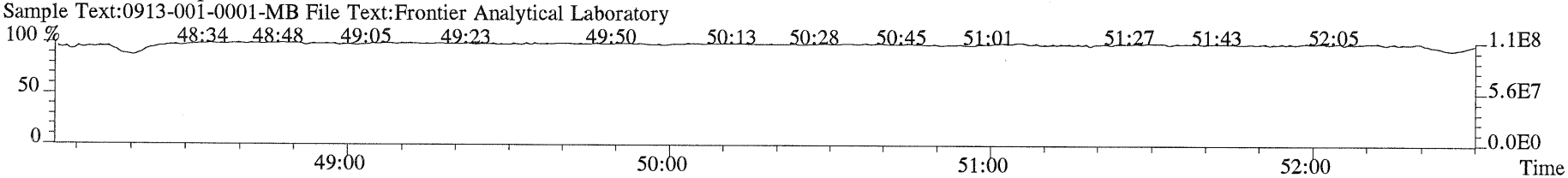
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



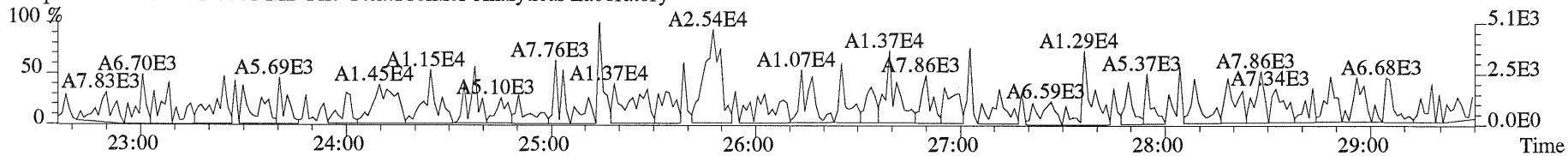
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



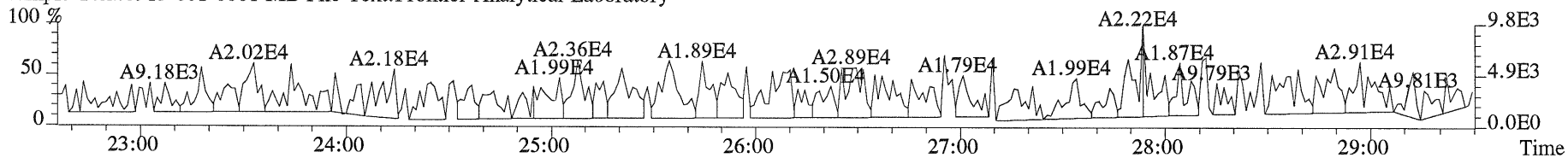
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



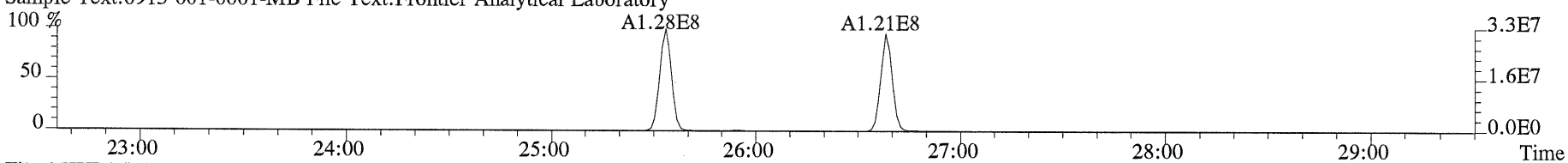
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



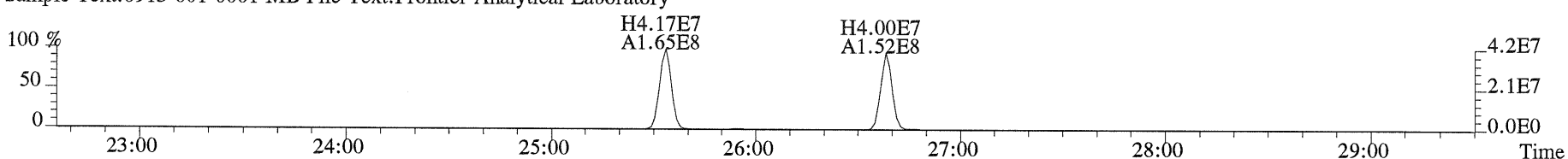
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



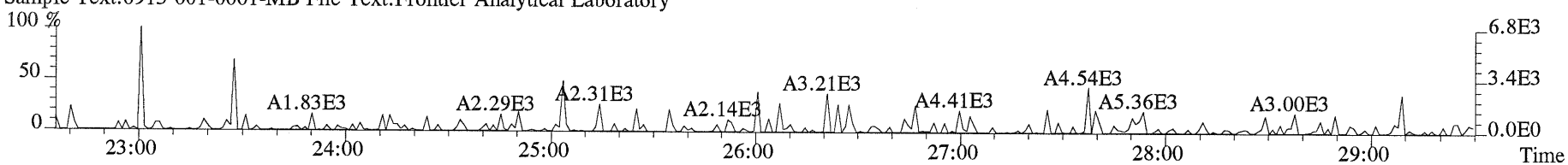
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



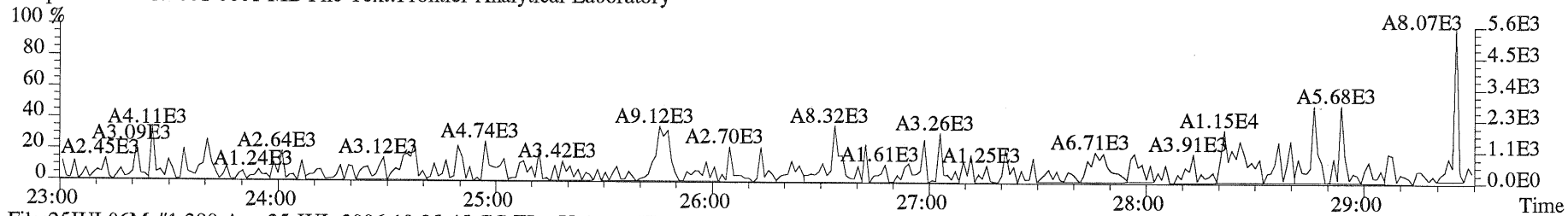
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



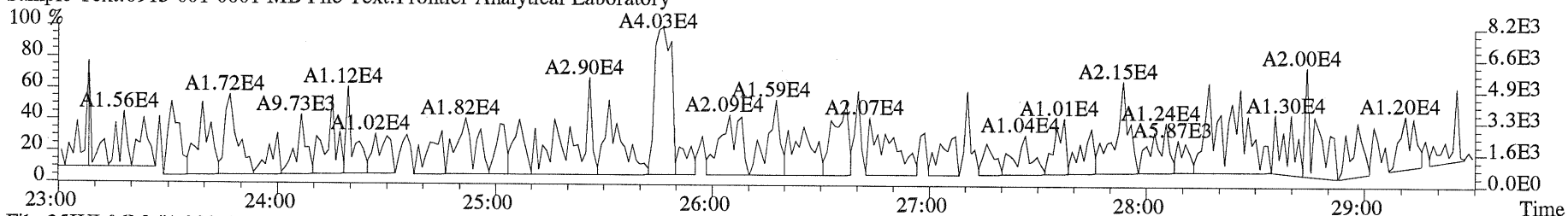
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



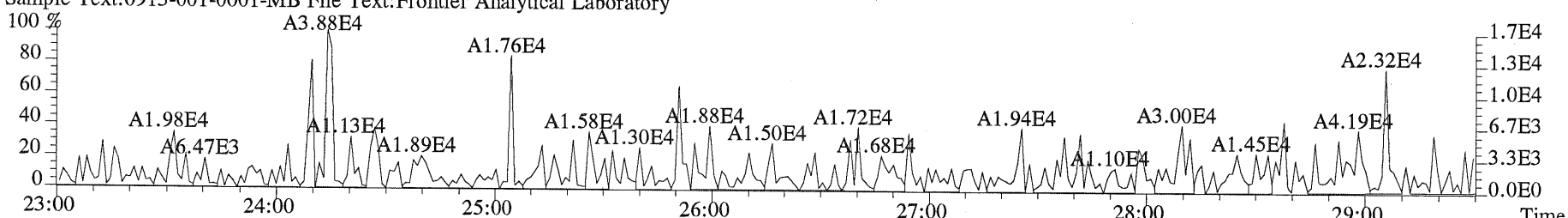
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



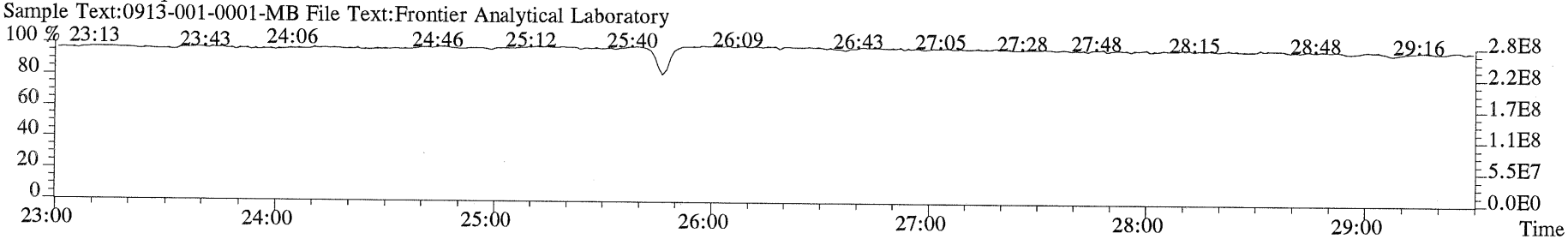
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



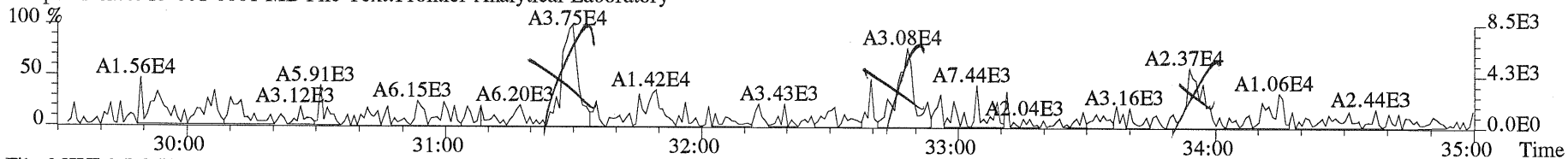
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



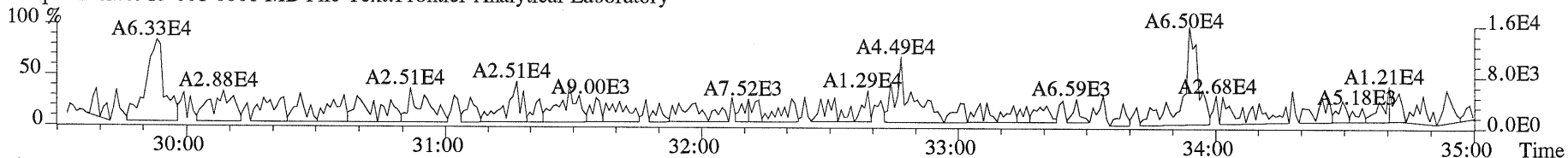
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



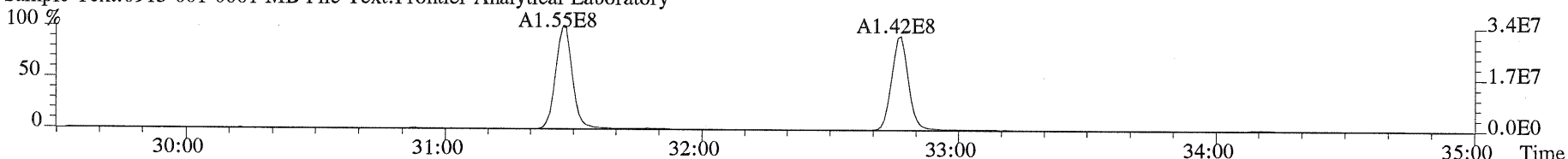
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



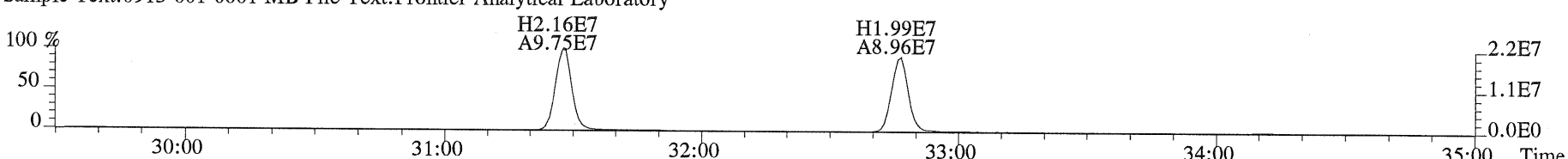
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



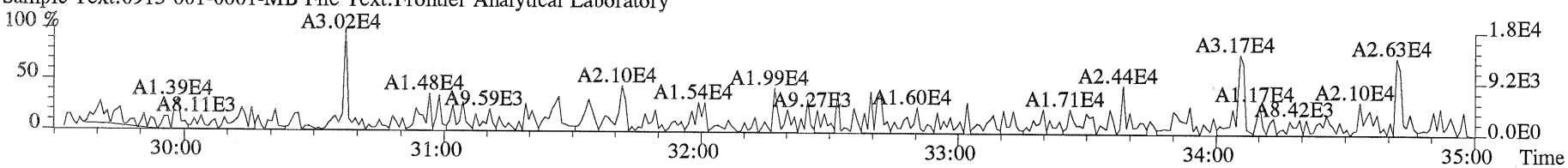
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



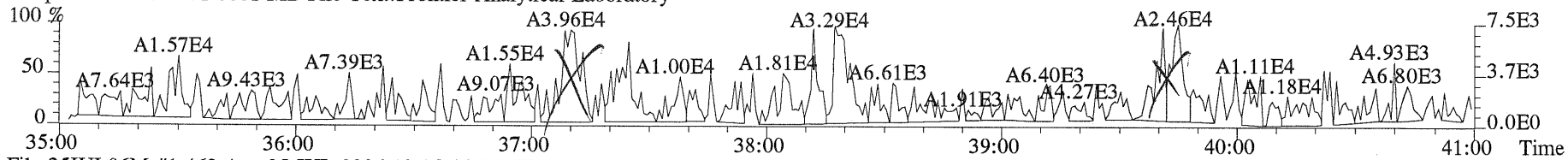
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



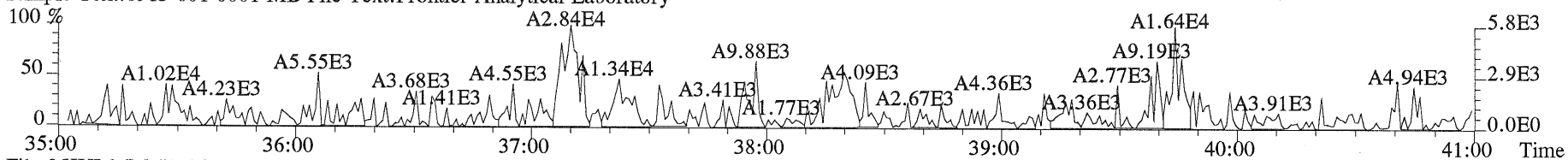
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



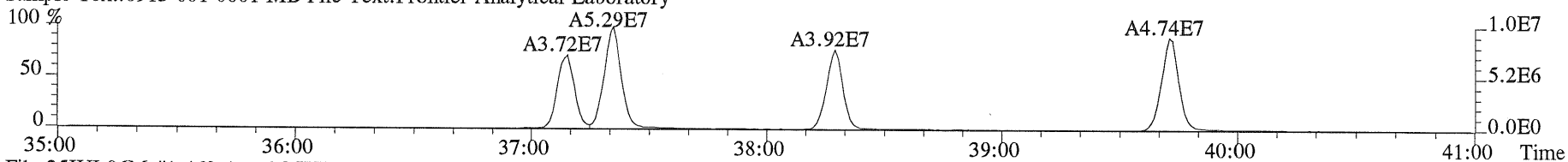
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



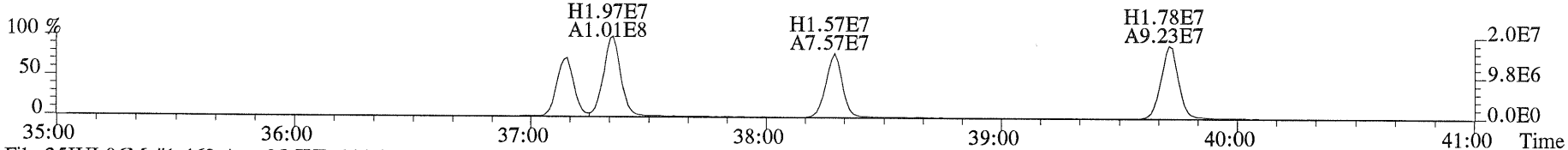
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



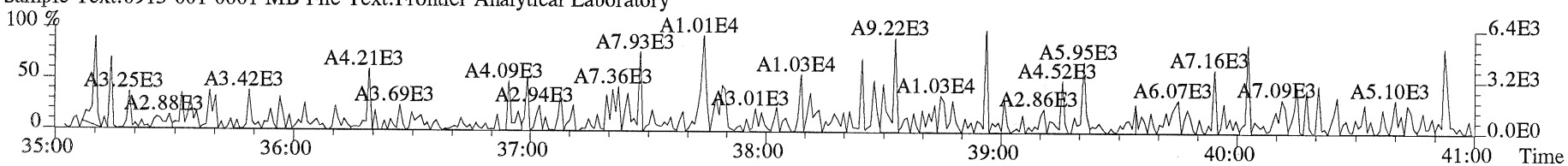
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



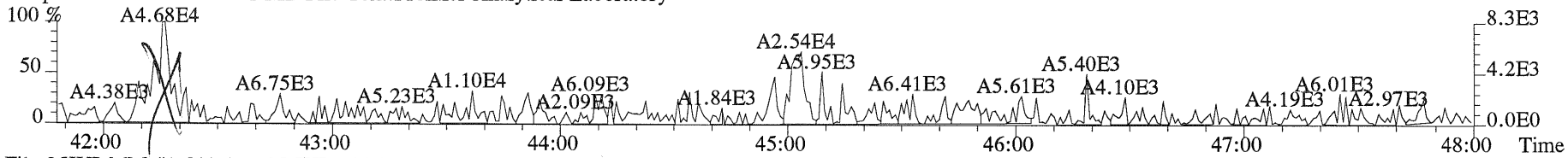
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



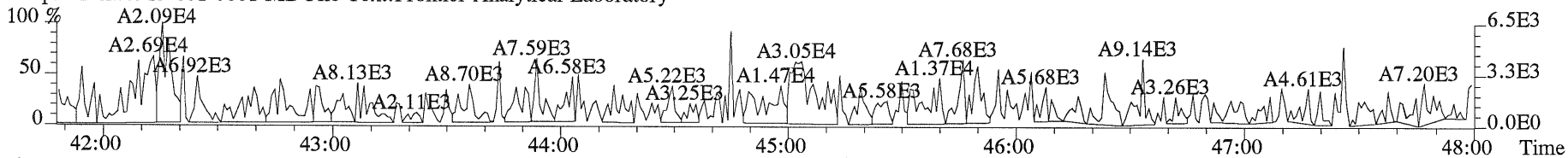
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



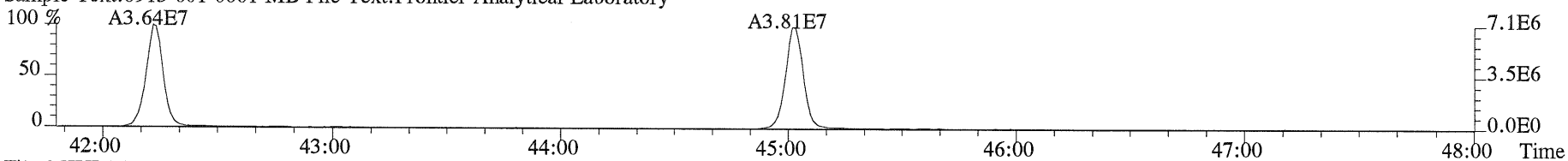
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



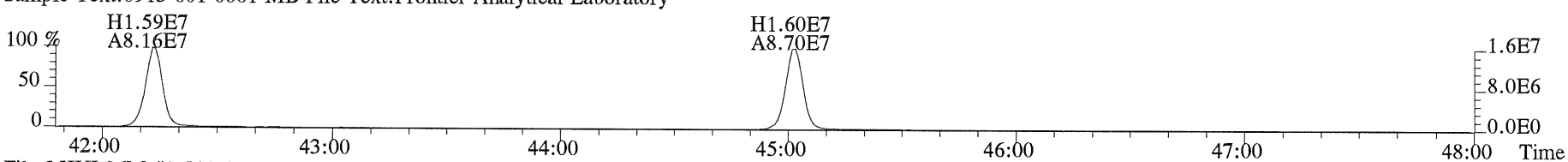
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



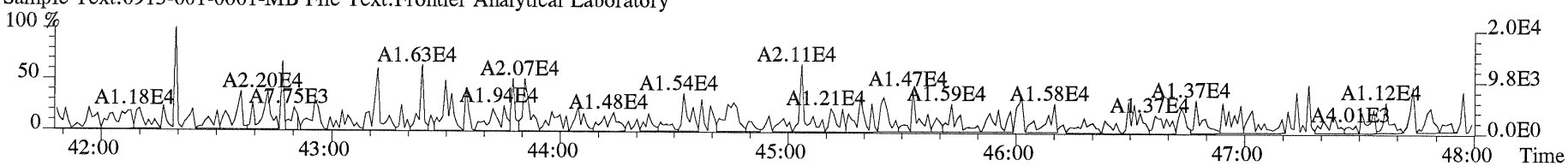
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



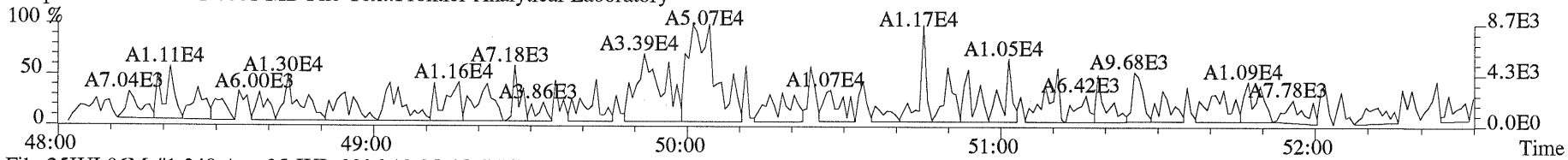
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



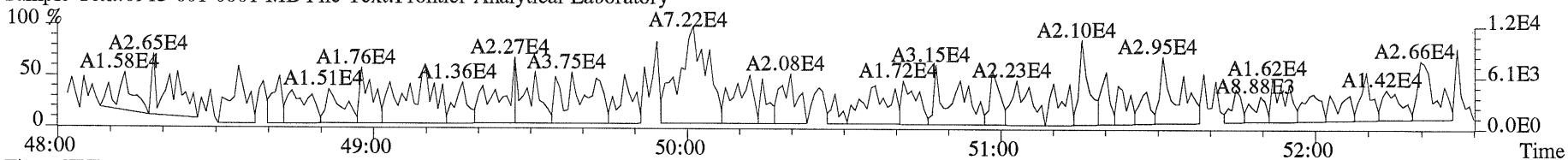
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



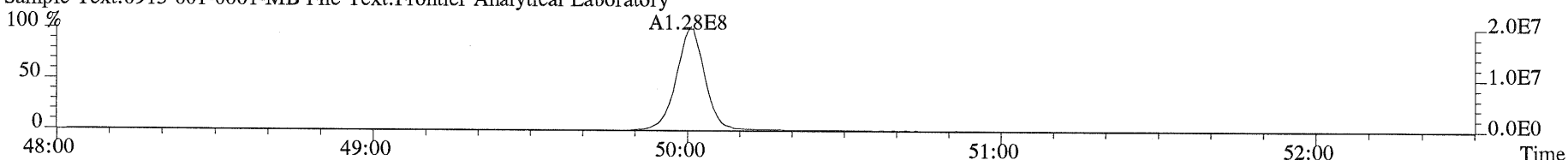
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



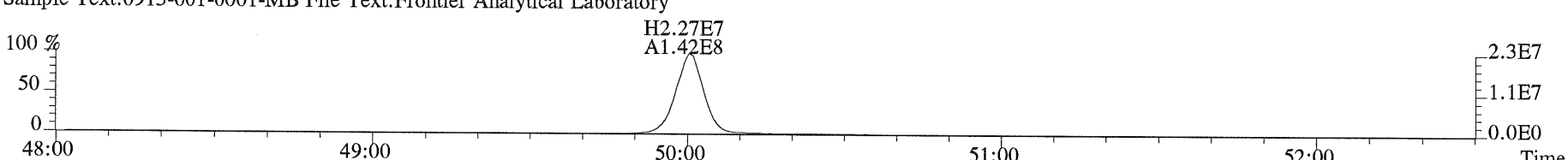
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



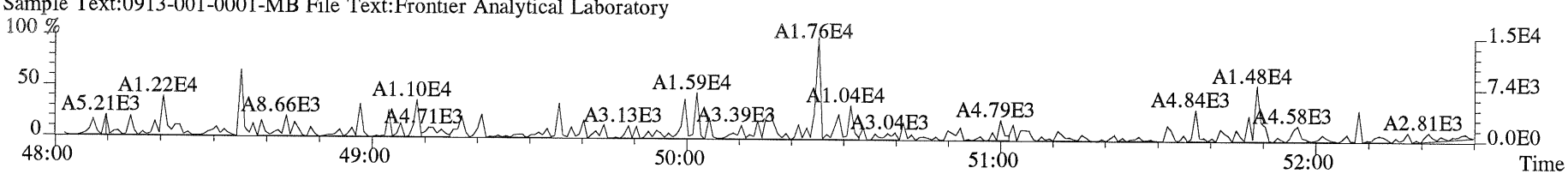
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



0913-001-0001-OPR

USEPA - ITD

FORM 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Solid OPR Data Filename: 25JUL06M Sam:5

Ext. Date: 7/24/06 Shift: Day Analysis Date: 25-JUL-06 18:30:25

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
NATIVE ANALYTES			
2,3,7,8-TCDD	10	8.19	6.70 - 15.8
1,2,3,7,8-PeCDD	50	45.7	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	48.0	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	47.8	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	48.4	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	47.9	35.0 - 70.0
OCDD	100	93.0	78.0 - 144
2,3,7,8-TCDF	10	8.52	7.50 - 15.8
1,2,3,7,8-PeCDF	50	48.4	40.0 - 67.0
2,3,4,7,8-PeCDF	50	48.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	49.7	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	49.3	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	48.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	48.8	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	49.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.9	39.0 - 69.0
OCDF	100	97.6	63.0 - 170

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613

Analyst: [signature] Date: 7/26/06

USEPA - ITD

FORM 8B
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Solid OPR Data Filename: 25JUL06M Sam:5

Ext. Date: 7/24/06 Shift: Day Analysis Date: 25-JUL-06 18:30:25

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	100	102	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	89.4	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	93.7	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	94.2	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	111	26.0 - 166
13C-OCDD	200	219	26.0 - 397
13C-2,3,7,8-TCDF	100	103	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	90.5	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	88.7	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	88.8	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	89.9	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	91.2	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	100	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	101	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	122	20.0 - 186
13C-OCDF	200	222	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	38.7	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613
Labeled compound concentration limits are based on required percent recovery of 25%-150%.

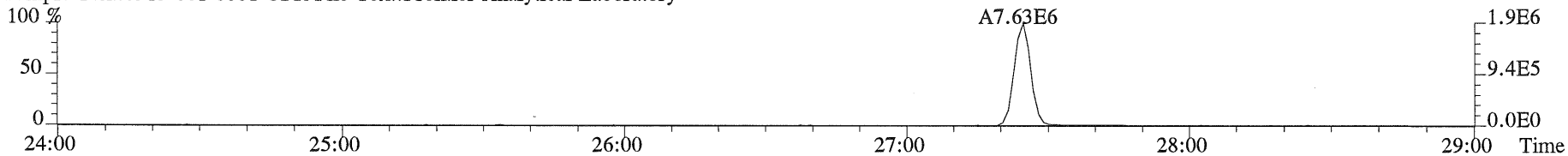
Analyst: [illegible] Date: 7/26/06

FAL ID: 0913-001-0001-OPR Filename: 25JUL06M Sam:5 Acquired: 25-JUL-06 18:30:25 ICal: PCDDFAL3-7-5-06
Client ID: OPR ConCal: ST072506M1 EndCal: ST072506M2
Results: 0913 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 94.2
WHO 1998 Tox: 117

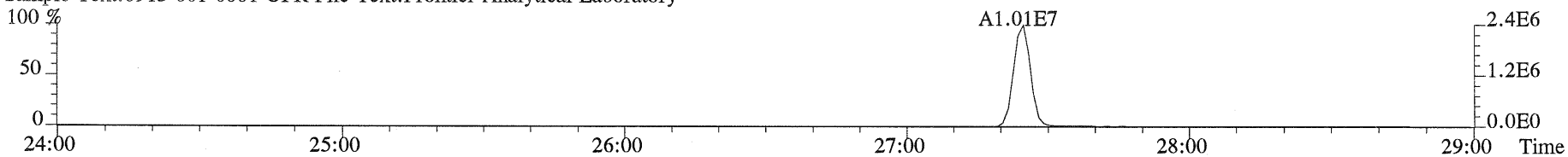
Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.77e+07	0.76 y	27:25	1.10	8.19		2.50	-	*	
1,2,3,7,8-PeCDD	6.85e+07	1.58 y	33:12	0.90	45.7		2.50	-	*	
1,2,3,4,7,8-HxCDD	5.60e+07	1.26 y	38:33	0.96	48.0		2.50	-	*	
1,2,3,6,7,8-HxCDD	5.81e+07	1.28 y	38:43	0.83	47.8		2.50	-	*	
1,2,3,7,8,9-HxCDD	5.02e+07	1.28 y	39:10	0.77	48.4		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	6.31e+07	1.05 y	44:08	0.86	47.9		2.50	-	*	
OCDD	9.09e+07	0.90 y	49:41	0.87	93.0		2.50	-	*	
2,3,7,8-TCDF	2.27e+07	0.77 y	26:40	0.99	8.52		2.50	-	*	
1,2,3,7,8-PeCDF	9.69e+07	1.59 y	31:29	0.80	48.4		2.50	-	*	
2,3,4,7,8-PeCDF	9.81e+07	1.59 y	32:48	0.88	48.4		2.50	-	*	
1,2,3,4,7,8-HxCDF	7.75e+07	1.26 y	37:10	1.42	49.7		2.50	-	*	
1,2,3,6,7,8-HxCDF	7.57e+07	1.26 y	37:22	0.97	49.3		2.50	-	*	
2,3,4,6,7,8-HxCDF	7.05e+07	1.25 y	38:19	1.26	48.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	9.23e+07	1.28 y	39:45	1.34	48.8		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	7.94e+07	1.02 y	42:15	1.28	49.7		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	7.29e+07	1.03 y	45:03	1.22	48.9		2.50	-	*	
OCDF	1.14e+08	0.89 y	50:02	0.90	97.6		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.97e+08	0.78 y	27:23	1.00	102					102
13C-1,2,3,7,8-PeCDD	1.66e+08	1.58 y	33:11	0.96	89.4					89.4
13C-1,2,3,4,7,8-HxCDD	1.22e+08	1.29 y	38:32	0.90	93.7					93.7
13C-1,2,3,6,7,8-HxCDD	1.47e+08	1.28 y	38:42	1.09	94.2					94.2
13C-1,2,3,4,6,7,8-HpCDD	1.53e+08	1.07 y	44:07	0.96	111					111
13C-OCDD	2.24e+08	0.89 y	49:39	0.71	219					110
13C-2,3,7,8-TCDF	2.68e+08	0.79 y	26:39	0.94	103					103
13C-1,2,3,7,8-PeCDF	2.51e+08	1.61 y	31:28	1.00	90.5					90.5
13C-2,3,4,7,8-PeCDF	2.31e+08	1.60 y	32:46	0.94	88.7					88.7
13C-1,2,3,4,7,8-HxCDF	1.10e+08	0.51 y	37:09	0.86	88.8					88.8
13C-1,2,3,6,7,8-HxCDF	1.58e+08	0.50 y	37:21	1.23	89.9					89.9
13C-2,3,4,6,7,8-HxCDF	1.16e+08	0.51 y	38:17	0.88	91.2					91.2
13C-1,2,3,7,8,9-HxCDF	1.41e+08	0.51 y	39:43	0.98	100					100
13C-1,2,3,4,6,7,8-HpCDF	1.25e+08	0.43 y	42:14	0.86	101					101
13C-1,2,3,4,7,8,9-HpCDF	1.22e+08	0.43 y	45:02	0.70	122					122
13C-OCDF	2.61e+08	0.88 y	50:01	0.82	222					111
37Cl-2,3,7,8-TCDD	6.08e+07		27:25	0.81	38.7					96.8
13C-1,2,3,4-TCDD	1.94e+08	0.80 y	26:49	-	101					
13C-1,2,3,4-TCDF	2.77e+08	0.77 y	25:34	-	96.2					
13C-1,2,3,7,8,9-HxCDD	1.43e+08	1.28 y	39:09	-	96.1					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	1.79e+07		23:09	1.10	8.29		2.50	-	*	10
Total Penta-Dioxins	6.86e+07		33:12	0.90	45.8		2.50	-	*	4
Total Hexa-Dioxins	1.65e+08		38:33	0.85	145		2.50	-	*	7
Total Hepta-Dioxins	6.36e+07		42:46	0.86	48.3		2.50	-	*	5
Total Tetra-Furans	2.35e+07		23:37	0.99	8.83		2.50	-	*	11
1st Fn. Tot Penta-Furans	1.92e+05		22:49	0.84	0.0952		2.50	-	*	28 PeCDF
Total Penta-Furans	1.97e+08		31:15	0.84	97.9		2.50	-	*	12 98.0
Total Hexa-Furans	3.18e+08		35:29	1.22	198		2.50	-	*	22
Total Hepta-Furans	1.55e+08		42:15	1.25	100		2.50	-	*	12

Analyst: [illegible] Date: 7/26/06

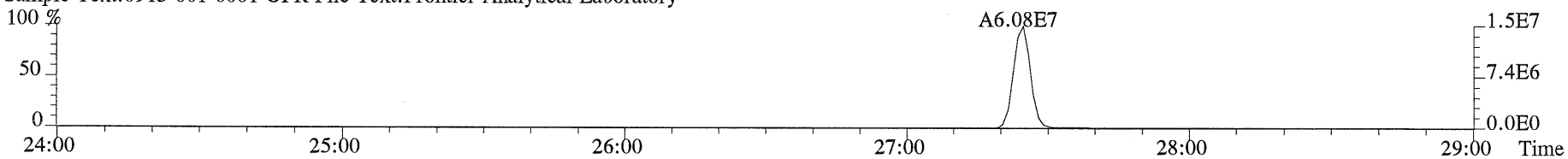
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



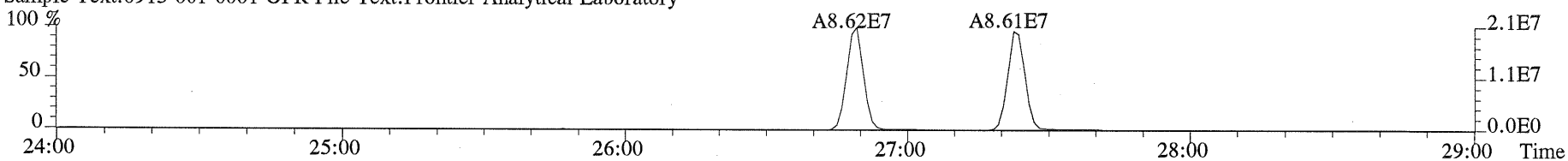
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



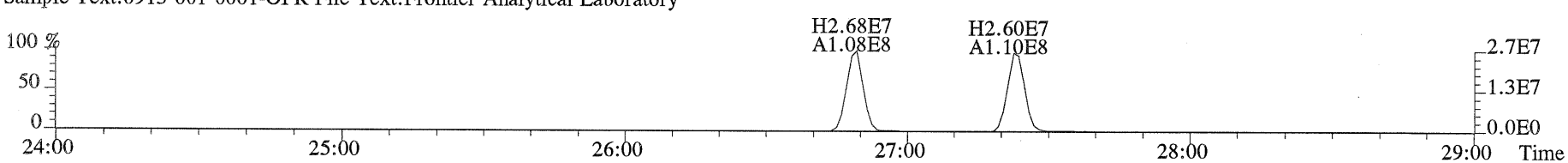
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



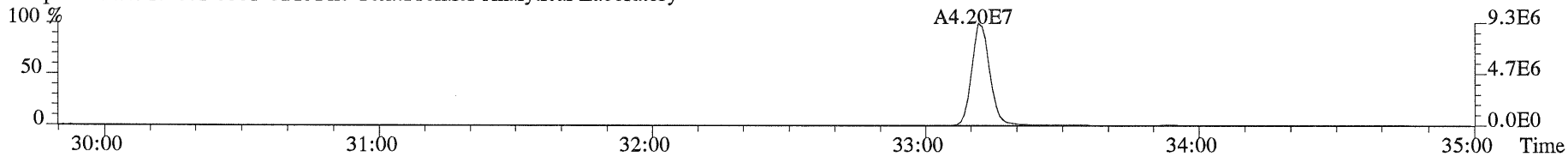
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



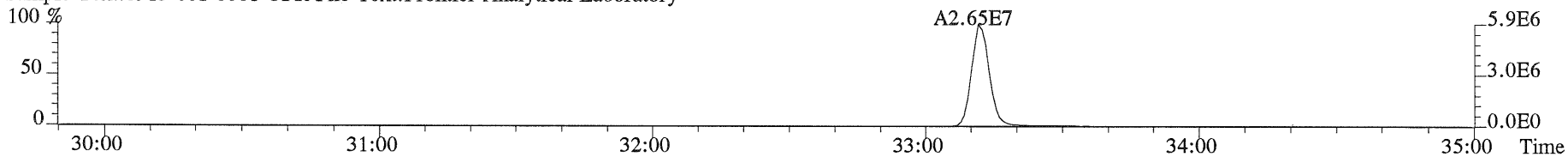
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



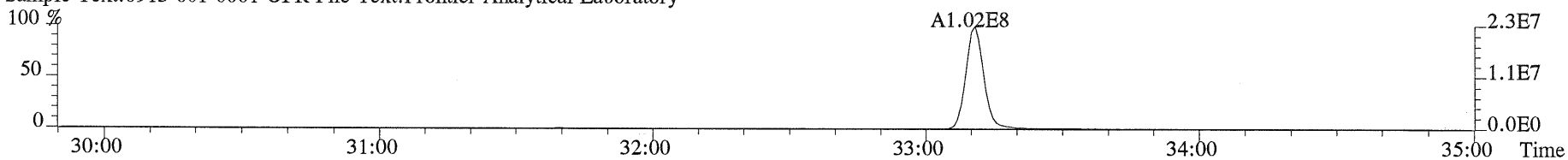
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



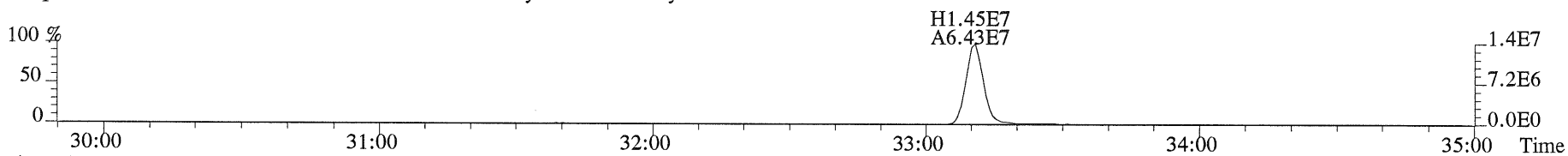
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



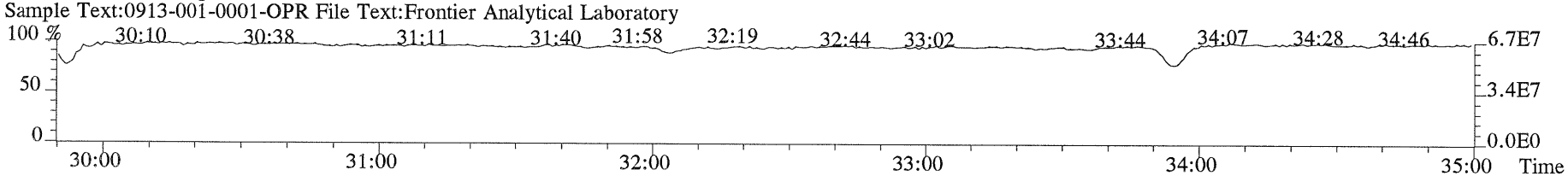
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



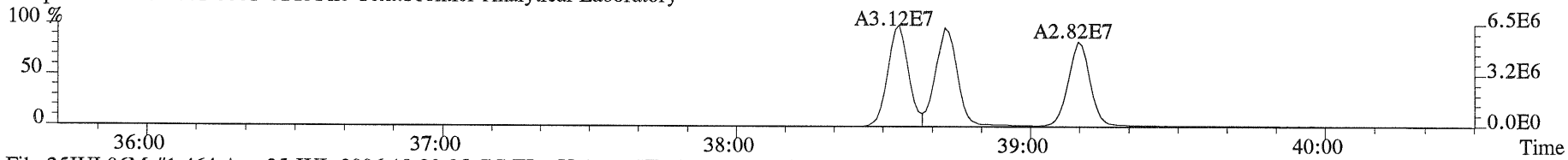
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



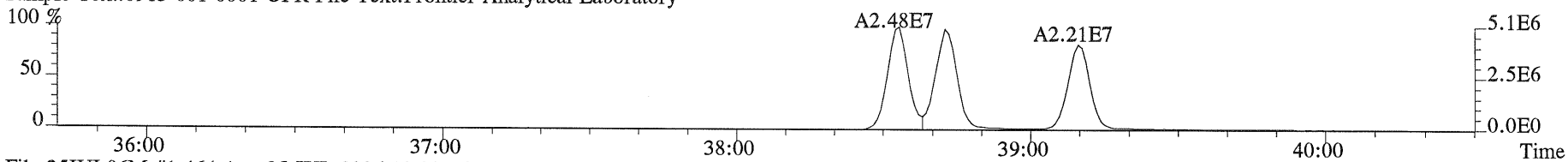
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



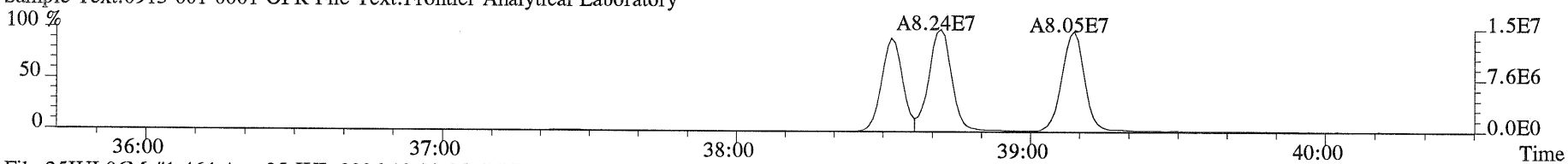
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



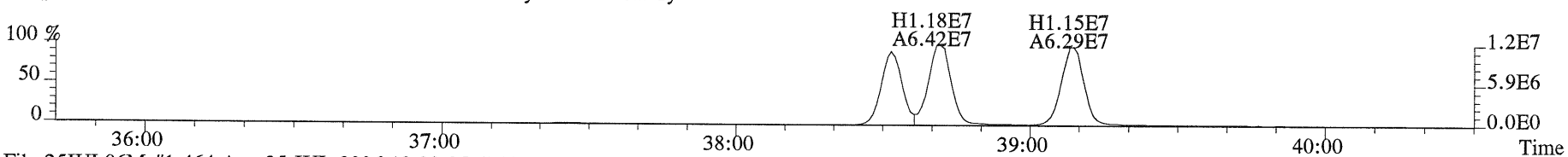
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



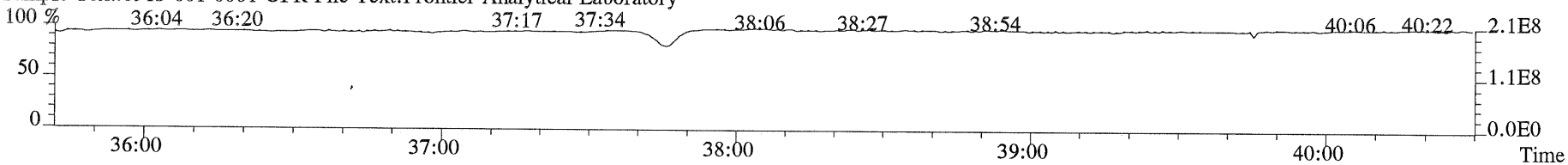
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



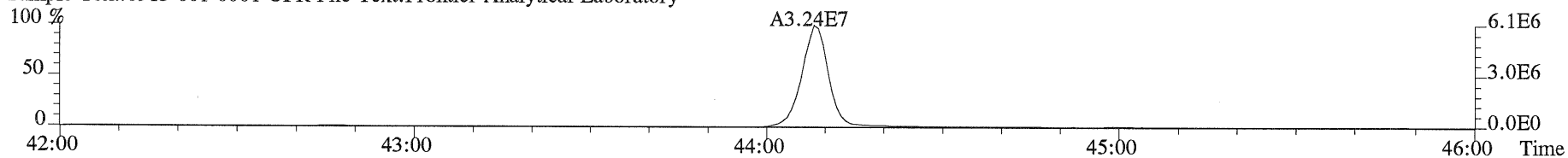
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



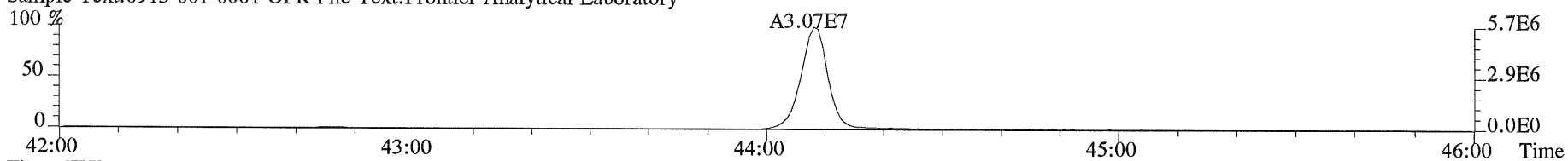
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



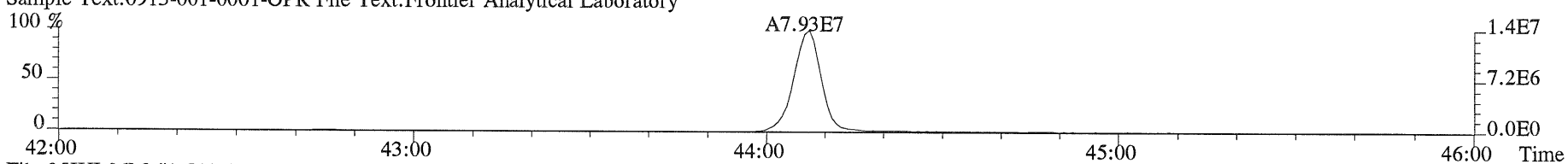
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



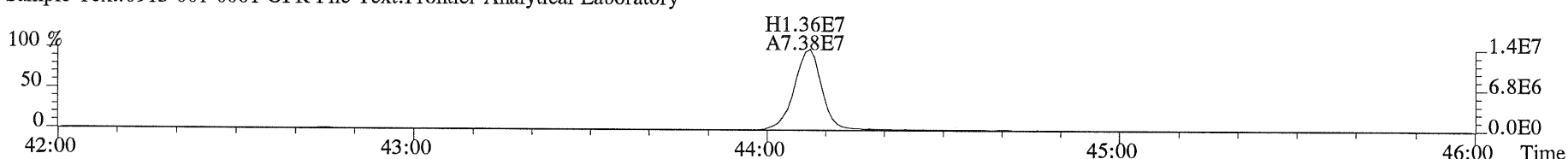
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



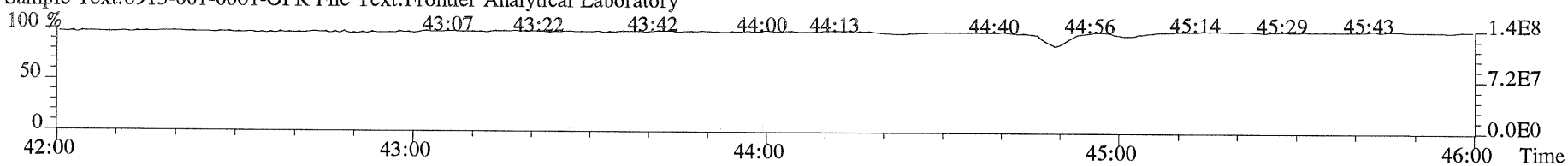
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



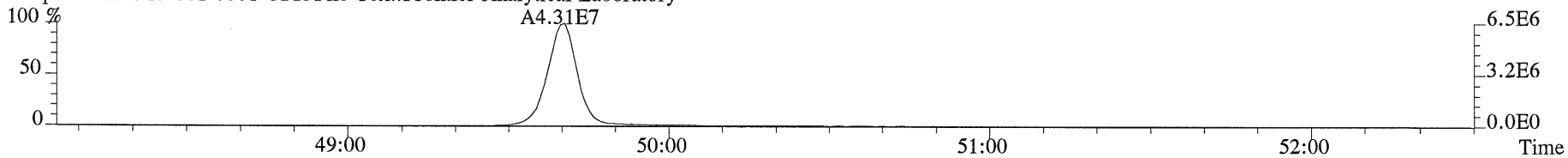
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



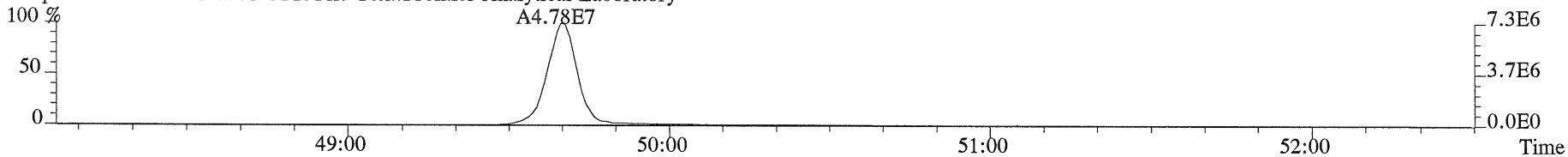
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



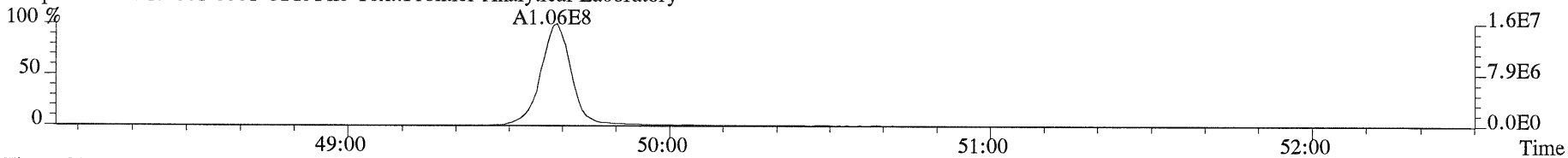
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



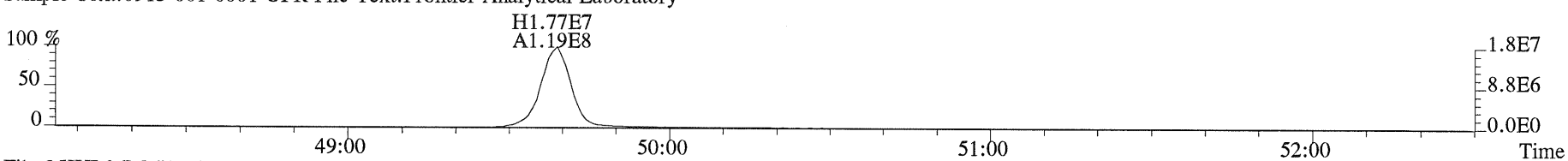
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



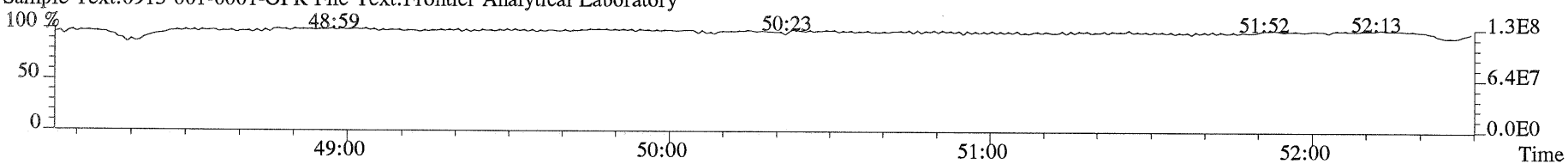
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



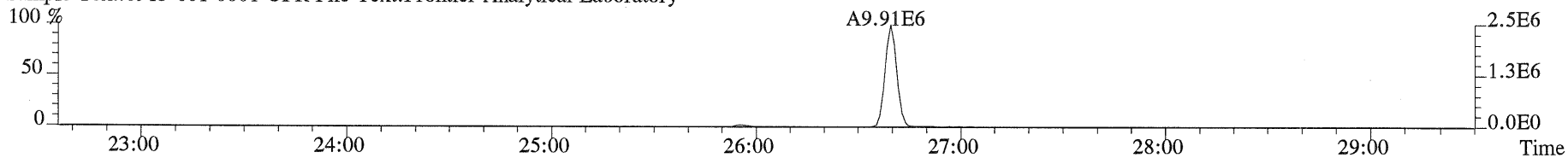
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



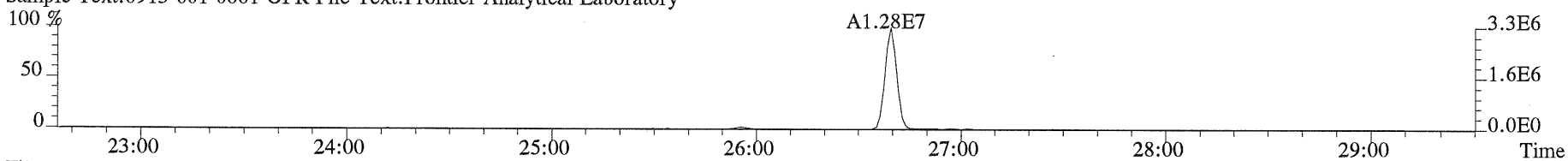
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



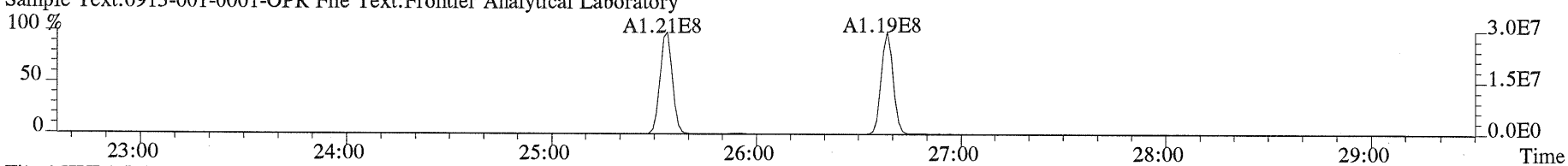
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



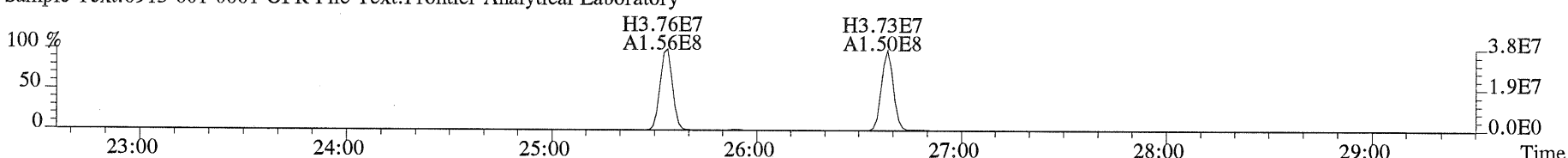
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



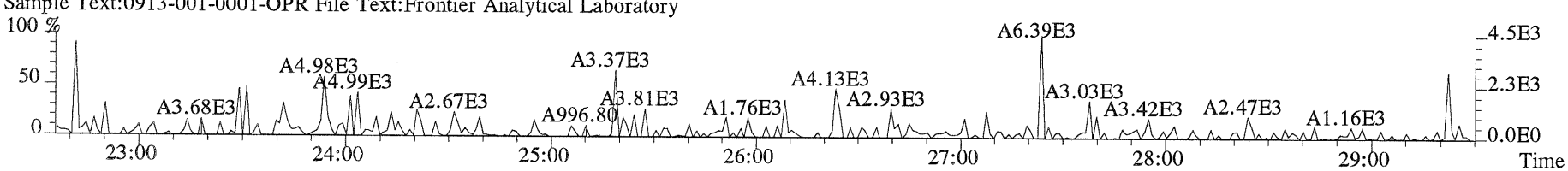
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



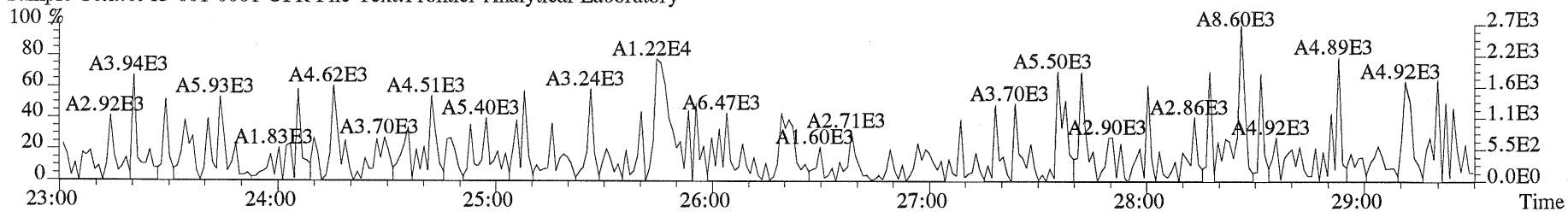
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



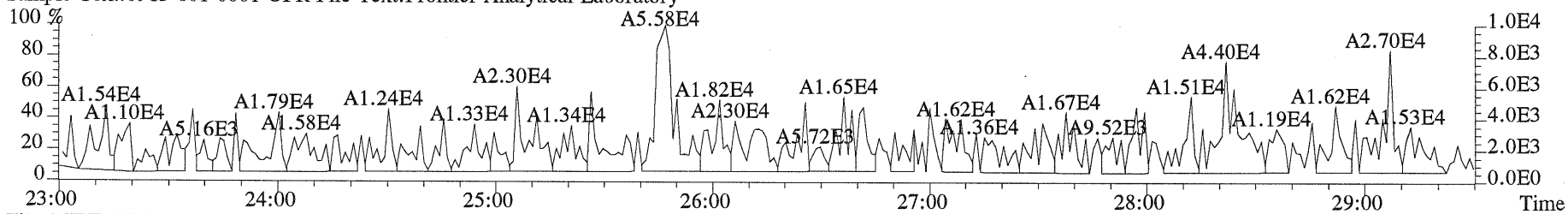
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



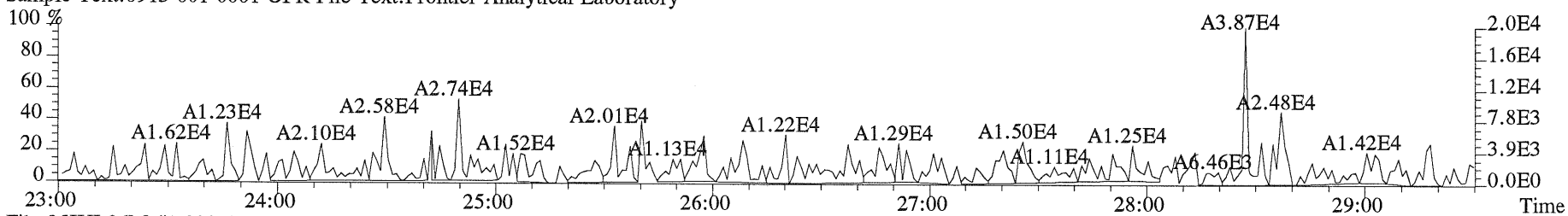
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



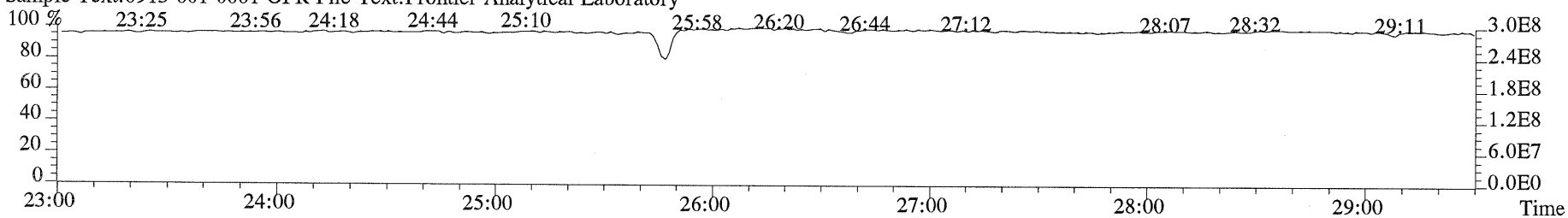
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



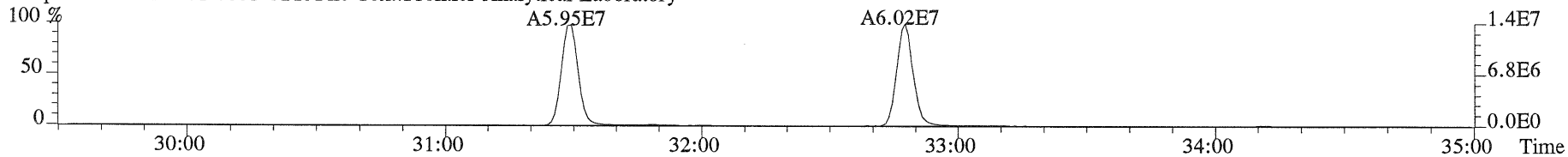
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



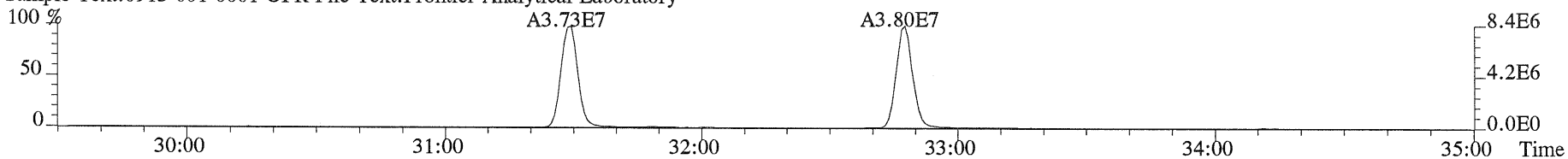
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



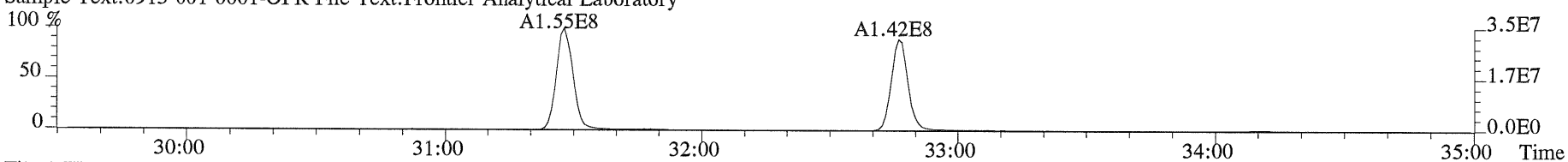
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



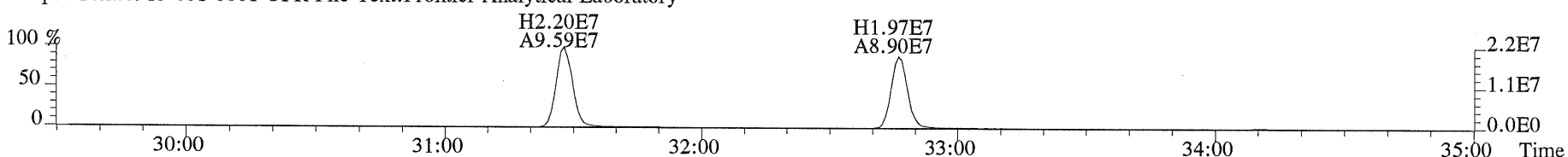
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



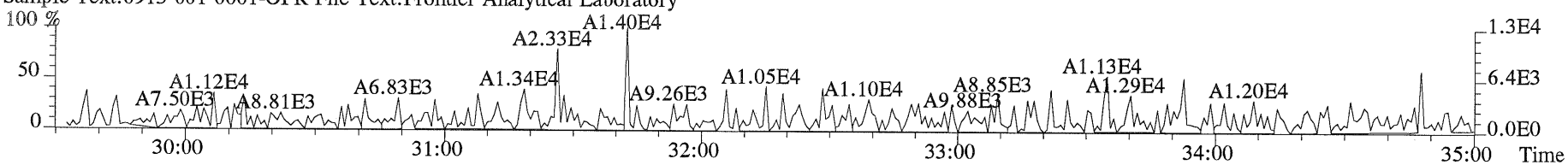
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



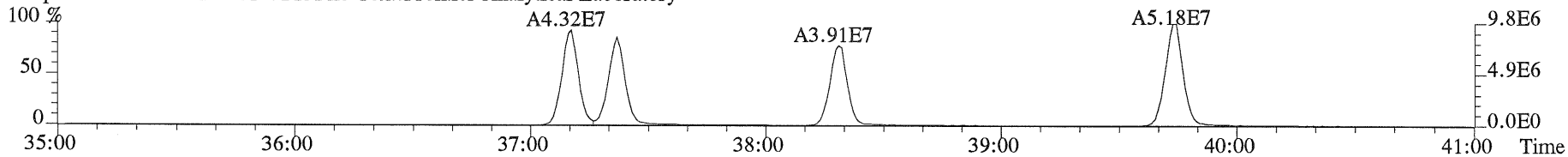
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



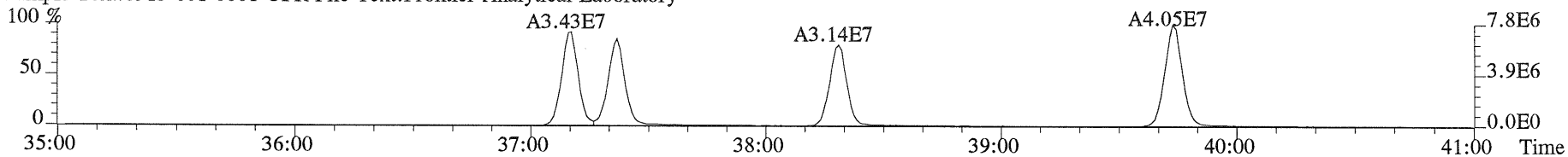
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



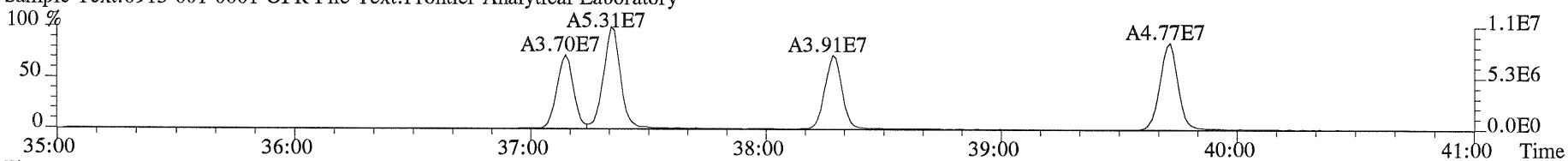
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



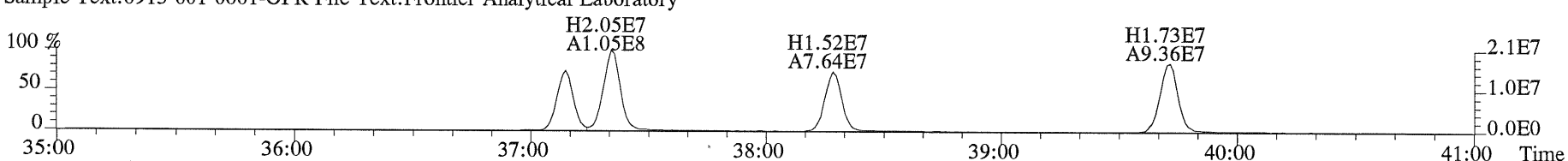
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



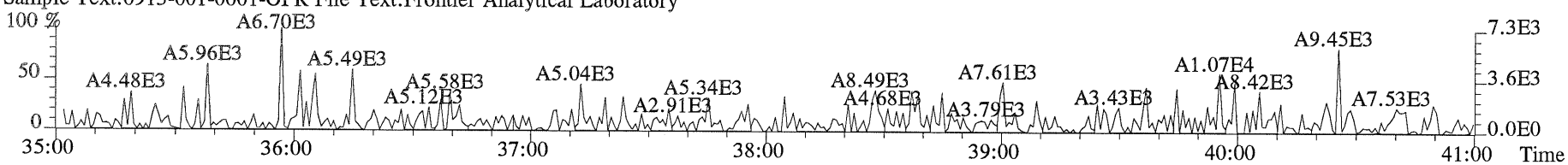
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



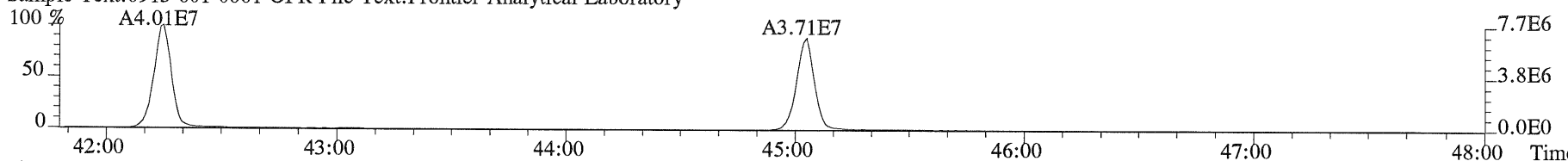
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



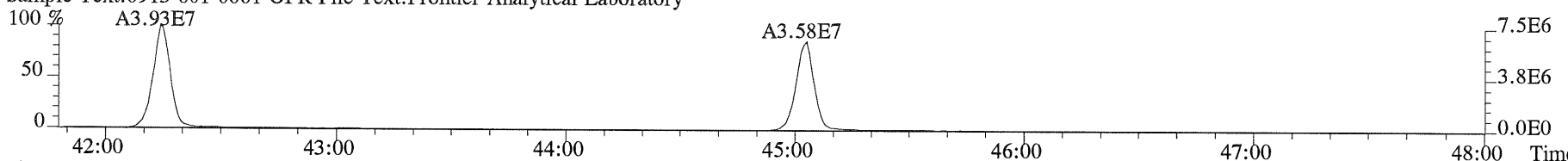
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



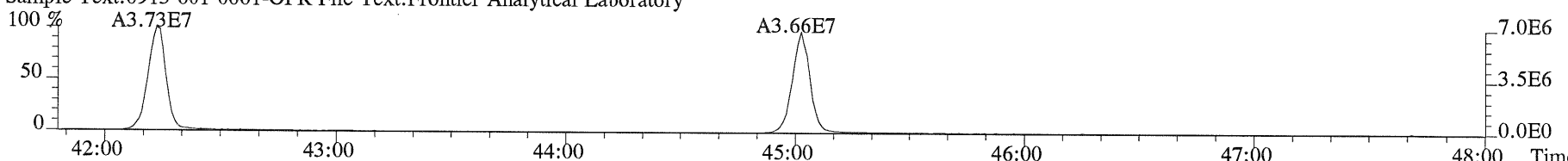
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



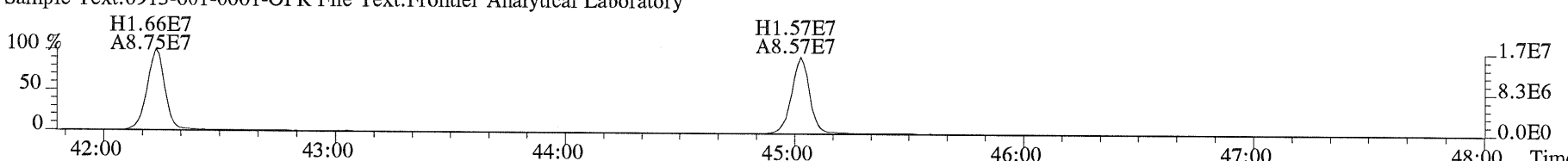
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



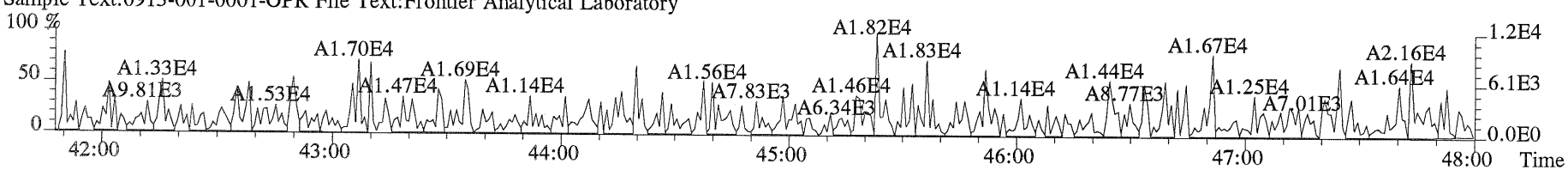
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



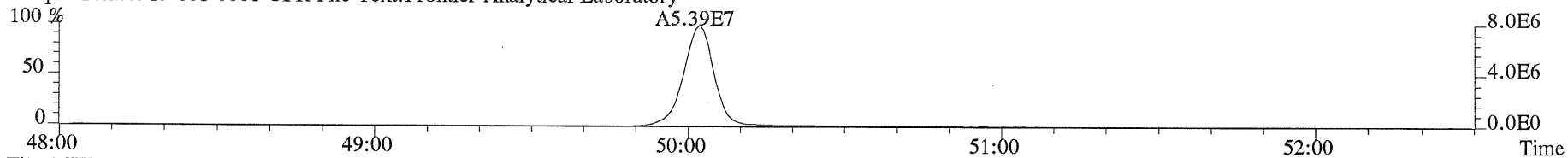
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



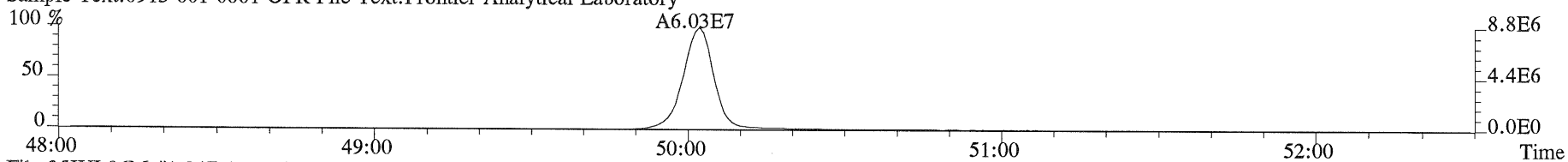
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



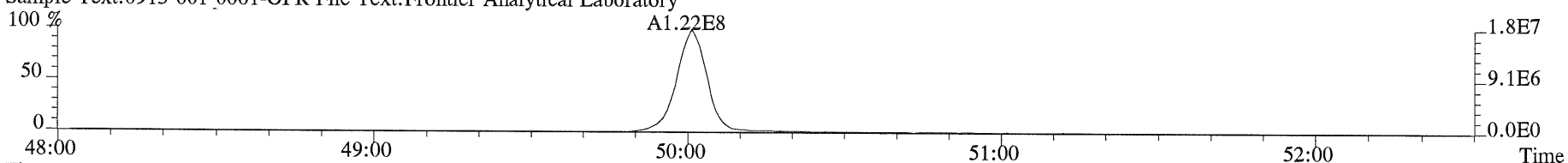
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



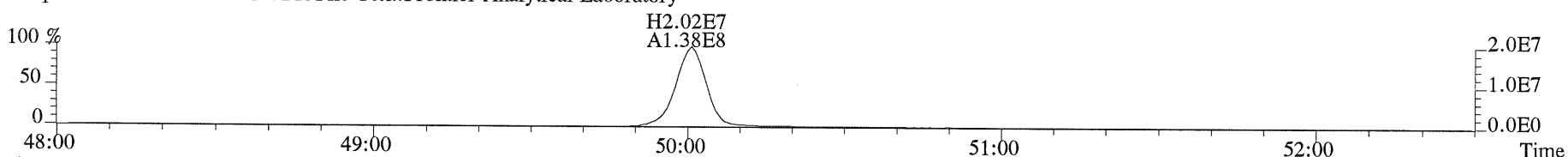
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



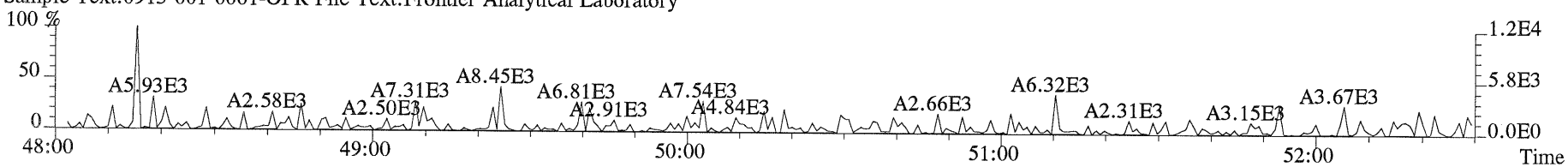
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



FAL ID: 3956-001-0001-SA Filename: 27JUL06M Sam:2 Acquired: 27-JUL-06 11:28:52 ICal: PCDDFAL3-7-5-06
Client ID: IG7-S1 ConCal: ST072706M1 EndCal: ST072706M2
Results: 3963-1 GC Column: DB5 Amount: 10.11 NATO 1989 Tox: 2.43
WHO 1998 Tox: 2.19

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	*	*	n	NotFnd	1.10	*		2.50	1710	0.0776	
1,2,3,7,8-PeCDD	1.10e+05	1.50	y	33:06	0.90	0.347	J	2.50	-	*	
1,2,3,4,7,8-HxCDD	2.12e+05	1.08	y	38:27	0.96	0.919	J	2.50	-	*	
1,2,3,6,7,8-HxCDD	6.84e+05	1.22	y	38:37	0.83	2.69		2.50	-	*	
1,2,3,7,8,9-HxCDD	4.74e+05	1.21	y	39:05	0.77	2.24	J	2.50	-	*	
1,2,3,4,6,7,8-HpCDD	1.13e+07	1.05	y	44:04	0.86	51.7		2.50	-	*	
OCDD	7.00e+07	0.89	y	49:35	0.87	413		2.50	-	*	
2,3,7,8-TCDF	2.07e+05	0.66	y	26:33	0.99	0.390	J	2.50	-	*	
1,2,3,7,8-PeCDF	1.41e+05	1.39	y	31:22	0.80	0.348	J	2.50	-	*	
2,3,4,7,8-PeCDF	1.18e+05	1.45	y	32:41	0.88	0.285	J	2.50	-	*	
1,2,3,4,7,8-HxCDF	3.40e+05	1.18	y	37:05	1.42	1.10	J	2.50	-	*	
1,2,3,6,7,8-HxCDF	2.87e+05	1.35	y	37:17	0.97	0.925	J	2.50	-	*	
2,3,4,6,7,8-HxCDF	2.97e+05	1.40	y	38:13	1.26	0.986	J	2.50	-	*	
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.34	*		2.50	2490	0.158	
1,2,3,4,6,7,8-HpCDF	4.83e+06	1.06	y	42:10	1.28	18.9		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	2.95e+05	0.96	y	44:58	1.22	1.18	J	2.50	-	*	
OCDF	8.60e+06	0.85	y	49:57	0.90	44.7		2.50	-	*	
											Rec
13C-2,3,7,8-TCDD	8.06e+07	0.79	y	27:17	1.00	207					104
13C-1,2,3,7,8-PeCDD	6.94e+07	1.57	y	33:05	0.96	186					93.9
13C-1,2,3,4,7,8-HxCDD	4.75e+07	1.27	y	38:27	0.90	197					99.6
13C-1,2,3,6,7,8-HxCDD	6.07e+07	1.28	y	38:37	1.09	210					106
13C-1,2,3,4,6,7,8-HpCDD	5.03e+07	1.05	y	44:03	0.96	197					99.4
13C-OCDD	7.70e+07	0.90	y	49:33	0.71	405					102
13C-2,3,7,8-TCDF	1.06e+08	0.77	y	26:32	0.94	224					113
13C-1,2,3,7,8-PeCDF	1.00e+08	1.56	y	31:22	1.00	199					101
13C-2,3,4,7,8-PeCDF	9.37e+07	1.58	y	32:40	0.94	197					99.7
13C-1,2,3,4,7,8-HxCDF	4.30e+07	0.53	y	37:03	0.86	188					94.8
13C-1,2,3,6,7,8-HxCDF	6.32e+07	0.51	y	37:15	1.23	193					97.5
13C-2,3,4,6,7,8-HxCDF	4.72e+07	0.51	y	38:12	0.88	200					101
13C-1,2,3,7,8,9-HxCDF	5.26e+07	0.50	y	39:37	0.98	201					101
13C-1,2,3,4,6,7,8-HpCDF	3.95e+07	0.45	y	42:08	0.86	171					86.6
13C-1,2,3,4,7,8,9-HpCDF	4.07e+07	0.43	y	44:57	0.70	218					110
13C-OCDF	8.48e+07	0.88	y	49:55	0.82	388					98.0
37Cl-2,3,7,8-TCDD	2.73e+07			27:18	0.81	86.4					109
13C-1,2,3,4-TCDD	7.73e+07	0.80	y	26:42	-	4.00					
13C-1,2,3,4-TCDF	9.96e+07	0.78	y	25:26	-	3.43					
13C-1,2,3,7,8,9-HxCDD	5.28e+07	1.31	y	39:04	-	3.50					
								Fac	Noise	DL	#Hom
Total Tetra-Dioxins	3.78e+05			24:17	1.10	0.842		2.50	-	*	2
Total Penta-Dioxins	1.27e+06			30:08	0.90	4.00		2.50	-	*	7
Total Hexa-Dioxins	6.19e+06			36:02	0.85	26.6		2.50	-	*	8
Total Hepta-Dioxins	2.31e+07			42:41	0.86	106		2.50	-	*	2
Total Tetra-Furans	3.04e+06			23:20	0.99	5.74		2.50	-	*	14
1st Fn. Tot Penta-Furans	1.00e+06			28:21	0.84	2.45		2.50	-	*	1 PeCDF
Total Penta-Furans	1.71e+06			29:57	0.84	4.18		2.50	-	*	7 6.62
Total Hexa-Furans	5.27e+06			35:11	1.22	16.6		2.50	-	*	6
Total Hepta-Furans	1.27e+07			42:10	1.25	49.9		2.50	-	*	3

Analyst: DPJ Date: 7/31/06

Totals class: Total Tetra-Dioxins Entry #: 38

Run: 10 File: 27JUL06M S: 2 I: 1 F: 1
Acquired: 27-JUL-06 11:28:52

Total Concentration: 0.842 Unnamed Concentration: 0.842

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
24:17	7.34e+04	8.41e+04	0.87 y	1.58e+05	0.351	
27:03	1.02e+05	1.18e+05	0.87 y	2.20e+05	0.491	

Totals class: Total Penta-Dioxins Entry #: 39

Run: 10 File: 27JUL06M S: 2 I: 1 F: 2
Acquired: 27-JUL-06 11:28:52

Total Concentration: 4.00 Unnamed Concentration: 3.650

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
30:08	2.61e+05	1.59e+05	1.64	y	4.20e+05	1.32	
30:45	6.32e+04	4.18e+04	1.51	y	1.05e+05	0.331	
31:22	8.28e+04	5.30e+04	1.56	y	1.36e+05	0.428	
31:36	1.04e+05	5.93e+04	1.76	y	1.64e+05	0.516	
31:43	6.75e+04	4.85e+04	1.39	y	1.16e+05	0.366	
32:01	1.36e+05	8.09e+04	1.68	y	2.17e+05	0.684	
33:06	6.60e+04	4.39e+04	1.50	y	1.10e+05	0.347	1,2,3,7,8-PeCDD

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 10 File: 27JUL06M S: 2 I: 1 F: 3
Acquired: 27-JUL-06 11:28:52

Total Concentration: 26.6 Unnamed Concentration: 20.727

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
36:02	8.91e+05	6.96e+05	1.28	y	1.59e+06	6.82	
36:56	1.93e+05	1.46e+05	1.32	y	3.39e+05	1.46	
37:21	1.43e+06	1.16e+06	1.23	y	2.58e+06	11.1	
37:34	8.76e+04	8.15e+04	1.07	y	1.69e+05	0.727	
38:27	1.10e+05	1.02e+05	1.08	y	2.12e+05	0.919	1,2,3,4,7,8-HxCDD
38:37	3.75e+05	3.08e+05	1.22	y	6.84e+05	2.69	1,2,3,6,7,8-HxCDD
38:56	7.47e+04	6.64e+04	1.13	y	1.41e+05	0.607	
39:05	2.60e+05	2.14e+05	1.21	y	4.74e+05	2.24	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 10 File: 27JUL06M S: 2 I: 1 F: 4
Acquired: 27-JUL-06 11:28:52

Total Concentration: 106 Unnamed Concentration: 54.118

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
42:41	6.01e+06	5.82e+06	1.03	y	1.18e+07	54.1	
44:04	5.78e+06	5.51e+06	1.05	y	1.13e+07	51.7	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 10 File: 27JUL06M S: 2 I: 1 F: 1
Acquired: 27-JUL-06 11:28:52

Total Concentration: 5.74 Unnamed Concentration: 5.346

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
23:20	4.62e+04	6.64e+04	0.70	y	1.13e+05	0.212	
23:43	2.00e+05	2.57e+05	0.78	y	4.57e+05	0.862	
24:06	1.20e+05	1.79e+05	0.67	y	3.00e+05	0.565	
24:19	1.64e+05	2.22e+05	0.74	y	3.86e+05	0.728	
24:37	7.32e+04	1.05e+05	0.70	y	1.78e+05	0.337	
24:44	7.38e+04	1.01e+05	0.73	y	1.74e+05	0.329	
24:50	7.92e+04	9.36e+04	0.85	y	1.73e+05	0.326	
25:14	6.07e+04	7.08e+04	0.86	y	1.31e+05	0.248	
25:20	8.10e+04	1.23e+05	0.66	y	2.05e+05	0.386	
25:28	5.79e+04	8.83e+04	0.66	y	1.46e+05	0.276	
25:48	6.64e+04	8.32e+04	0.80	y	1.50e+05	0.282	
26:02	5.81e+04	6.81e+04	0.85	y	1.26e+05	0.238	
26:33	8.20e+04	1.25e+05	0.66	y	2.07e+05	0.390	2,3,7,8-TCDF
26:53	1.20e+05	1.74e+05	0.69	y	2.94e+05	0.555	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 10 File: 27JUL06M S: 2 I: 1 F: 1
Acquired: 27-JUL-06 11:28:52

Total Concentration: 2.45 Unnamed Concentration: 2.446

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:21	5.99e+05	4.05e+05	1.48 y	1.00e+06	2.45	

Totals class: Total Penta-Furans Entry #: 44

Run: 10 File: 27JUL06M S: 2 I: 1 F: 2
Acquired: 27-JUL-06 11:28:52

Total Concentration: 4.18 Unnamed Concentration: 3.544

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
29:57	1.23e+05	7.89e+04	1.56	y	2.02e+05	0.492	
30:08	4.26e+05	3.11e+05	1.37	y	7.37e+05	1.80	
30:51	1.40e+05	8.91e+04	1.57	y	2.29e+05	0.558	
31:22	8.22e+04	5.90e+04	1.39	y	1.41e+05	0.348	1,2,3,7,8-PeCDF
31:42	9.09e+04	6.57e+04	1.38	y	1.57e+05	0.382	
32:41	6.99e+04	4.82e+04	1.45	y	1.18e+05	0.285	2,3,4,7,8-PeCDF
32:46	8.00e+04	4.92e+04	1.62	y	1.29e+05	0.315	

Totals class: Total Hexa-Furans Entry #: 45

Run: 10 File: 27JUL06M S: 2 I: 1 F: 3
Acquired: 27-JUL-06 11:28:52

Total Concentration: 16.6 Unnamed Concentration: 13.624

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
35:11	3.31e+05	2.91e+05	1.14	y	6.22e+05	1.95	
35:28	1.07e+06	8.22e+05	1.30	y	1.89e+06	5.93	
36:19	1.05e+06	7.81e+05	1.34	y	1.83e+06	5.75	
37:05	1.84e+05	1.56e+05	1.18	y	3.40e+05	1.10	1,2,3,4,7,8-HxCDF
37:17	1.65e+05	1.22e+05	1.35	y	2.87e+05	0.925	1,2,3,6,7,8-HxCDF
38:13	1.73e+05	1.24e+05	1.40	y	2.97e+05	0.986	2,3,4,6,7,8-HxCDF

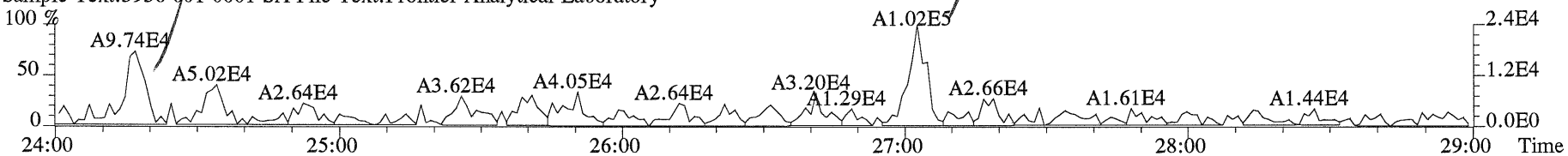
Totals class: Total Hepta-Furans Entry #: 46

Run: 10 File: 27JUL06M S: 2 I: 1 F: 4
Acquired: 27-JUL-06 11:28:52

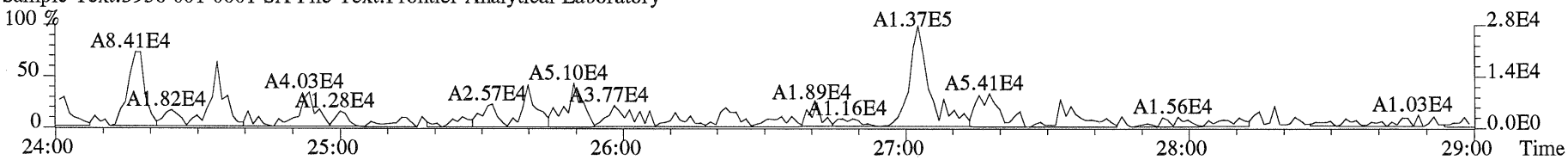
Total Concentration: 49.9 Unnamed Concentration: 29.816

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
42:10	2.48e+06	2.35e+06	1.06 y	4.83e+06	18.9	1,2,3,4,6,7,8-HpCDF
42:59	3.87e+06	3.69e+06	1.05 y	7.56e+06	29.8	
44:58	1.44e+05	1.51e+05	0.96 y	2.95e+05	1.18	1,2,3,4,7,8,9-HpCDF

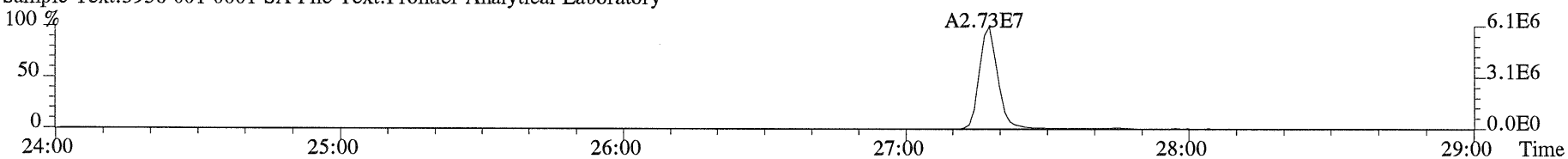
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



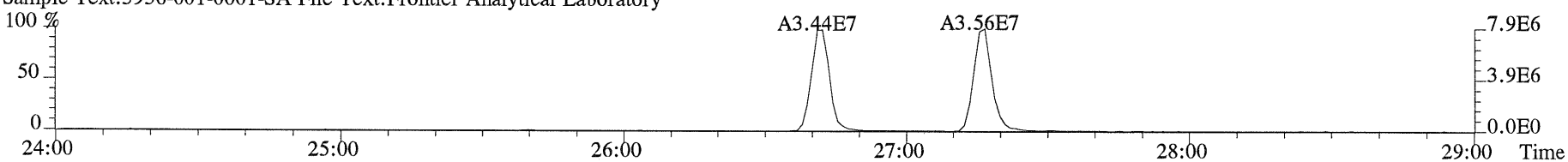
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



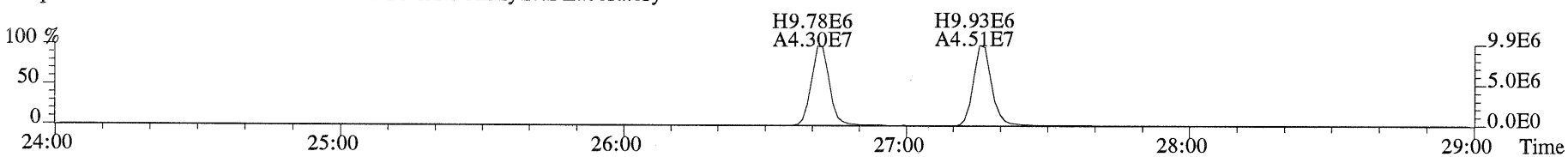
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



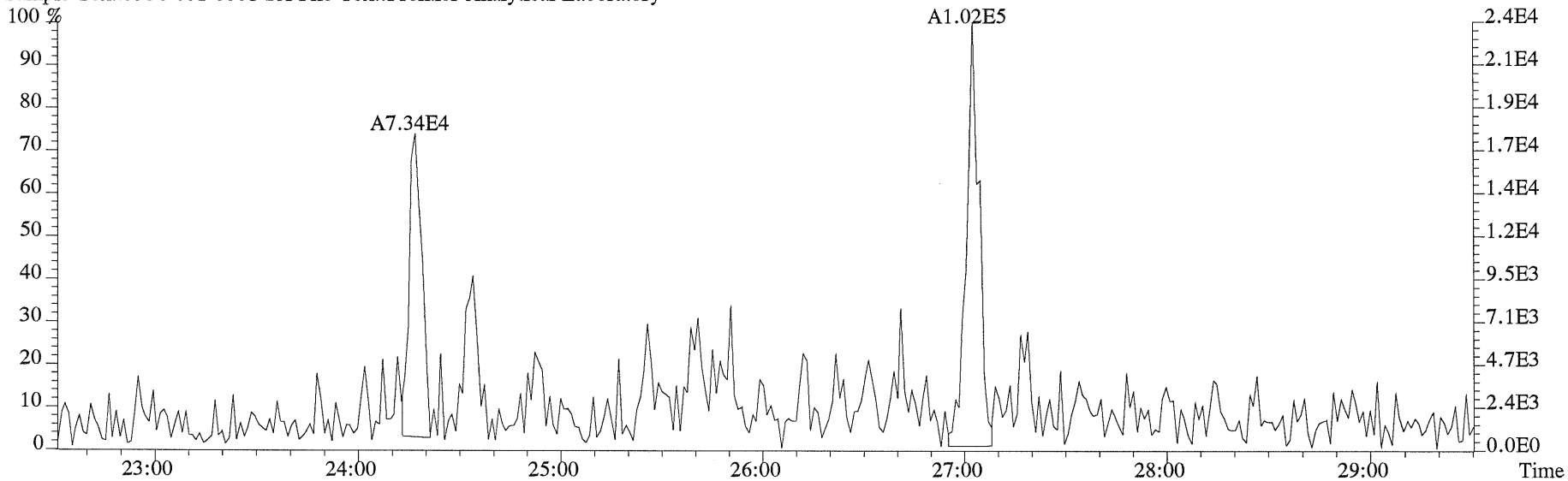
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



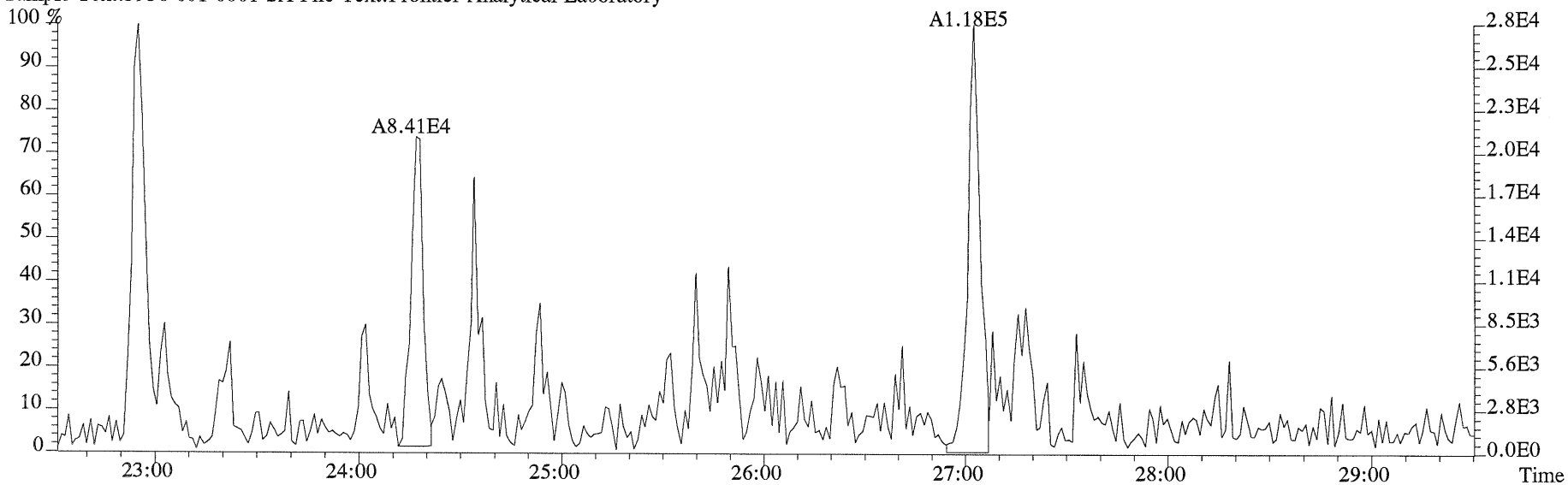
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



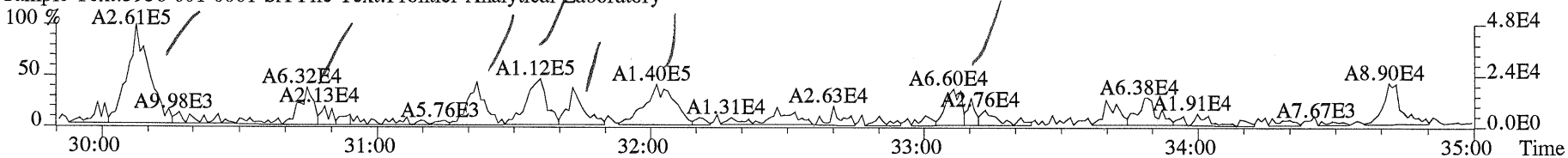
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



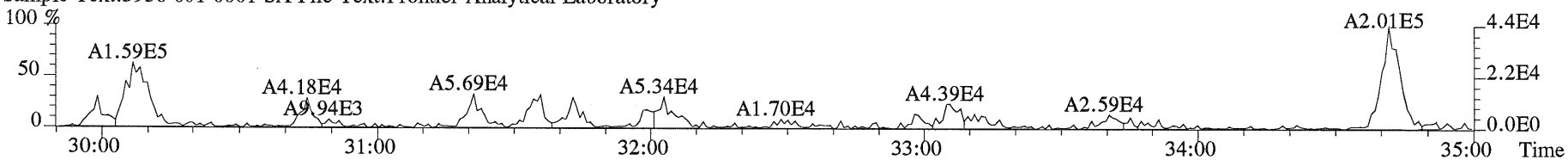
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



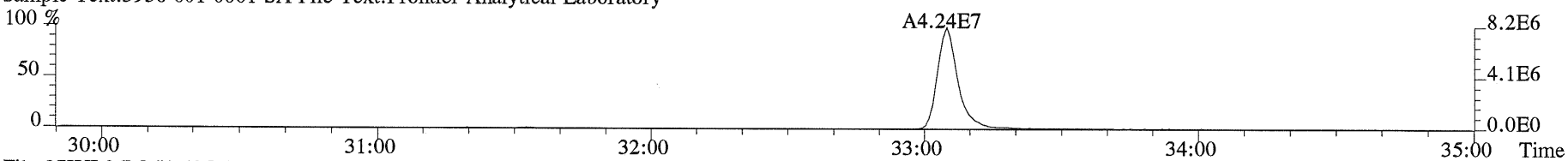
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



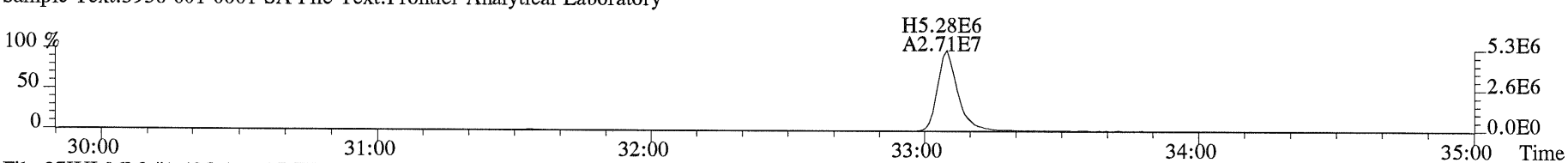
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



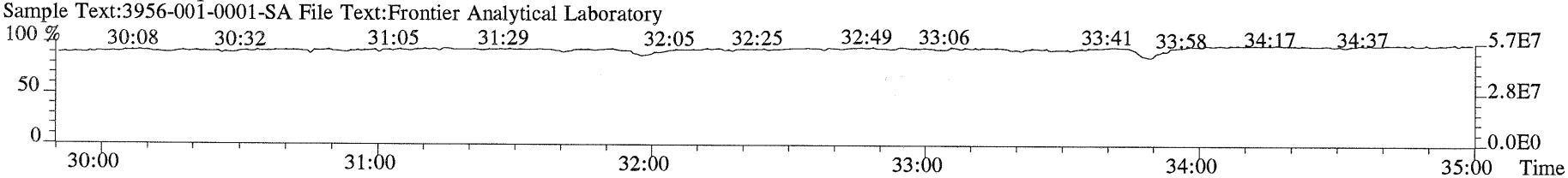
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



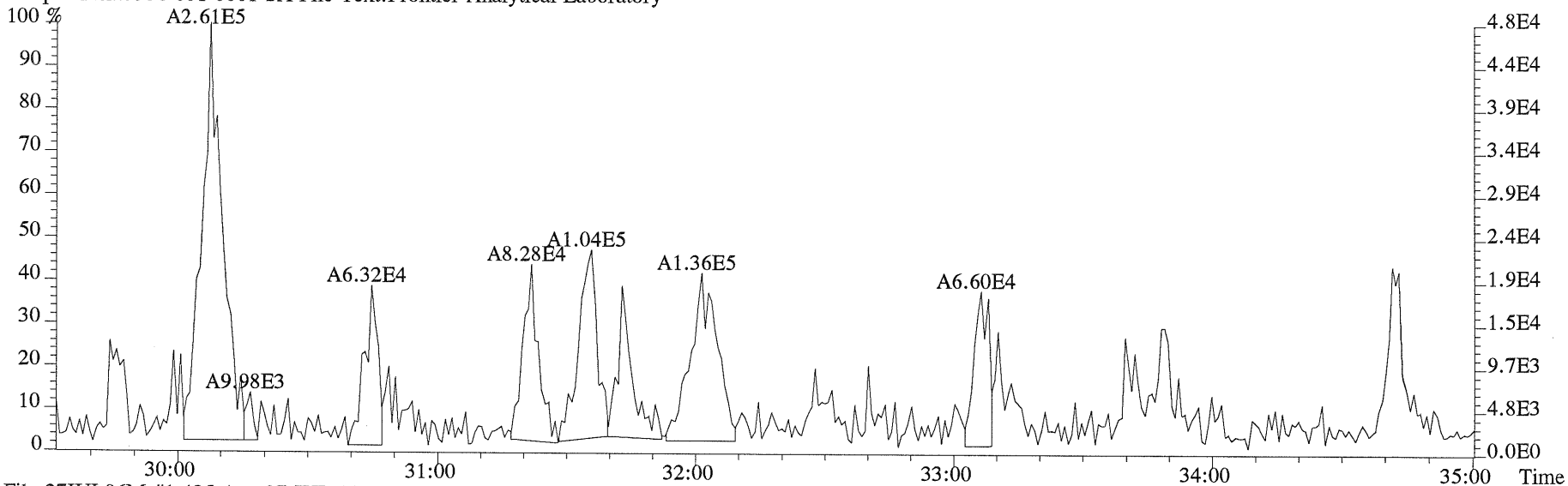
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



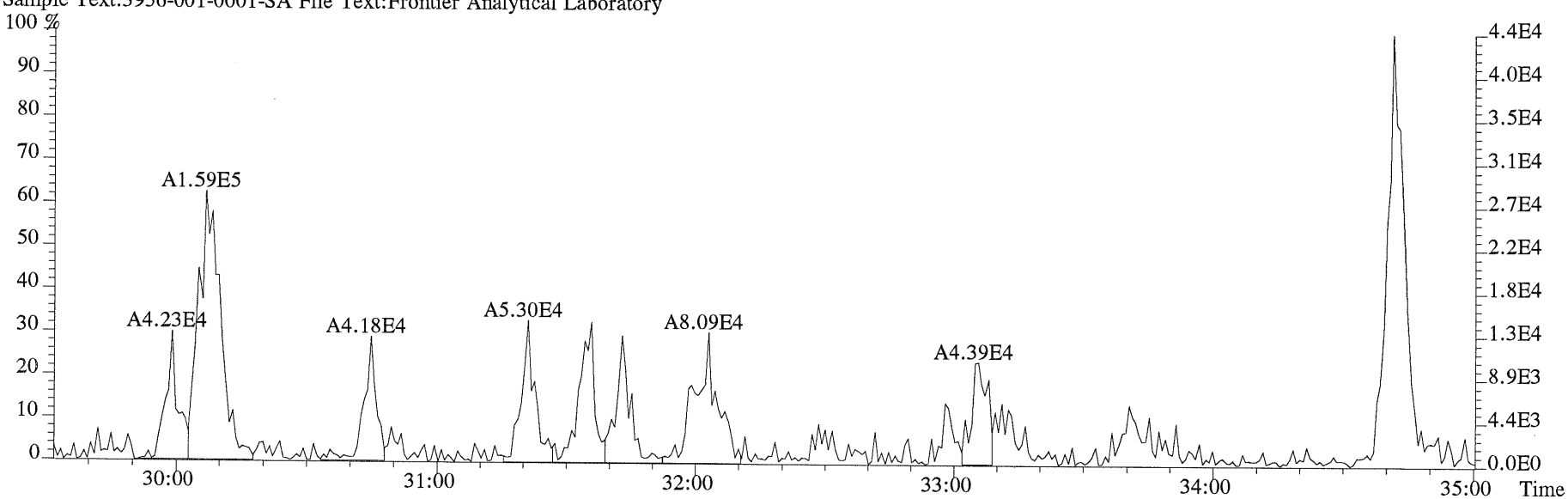
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



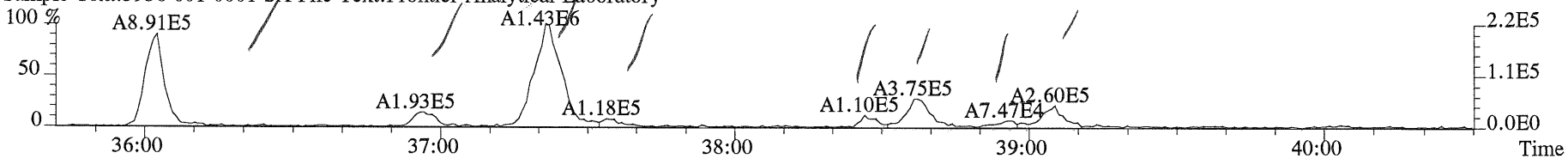
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



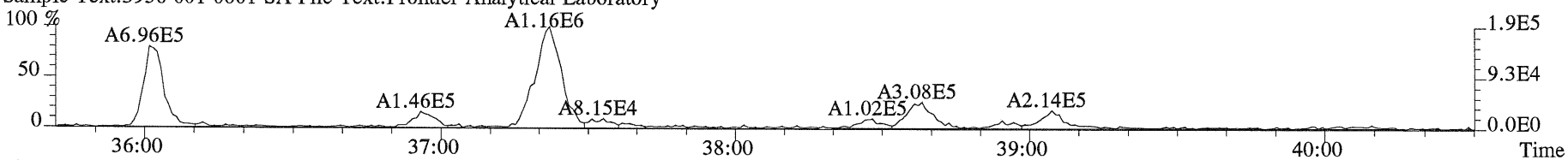
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



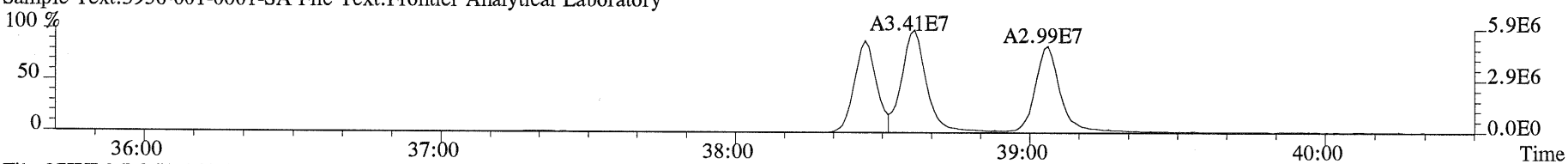
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



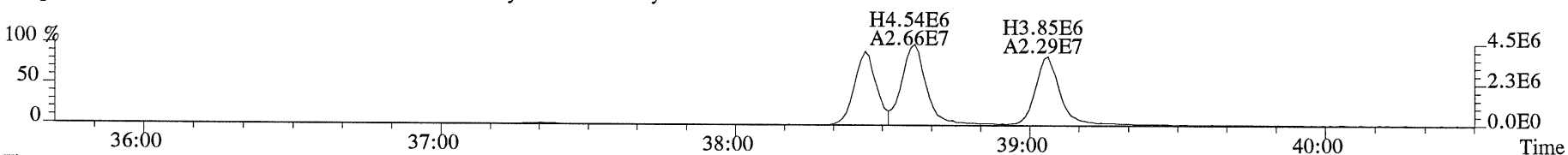
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



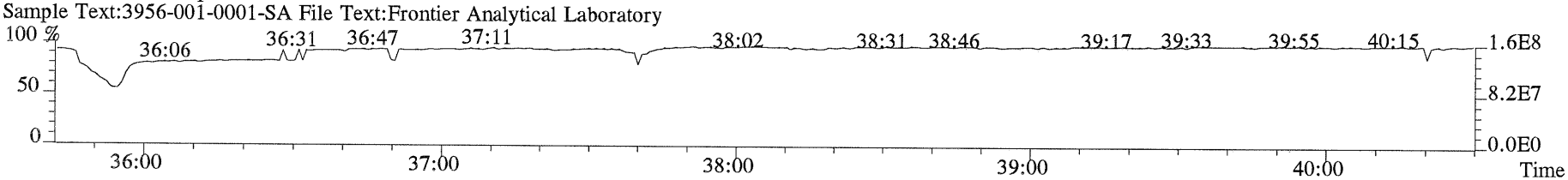
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



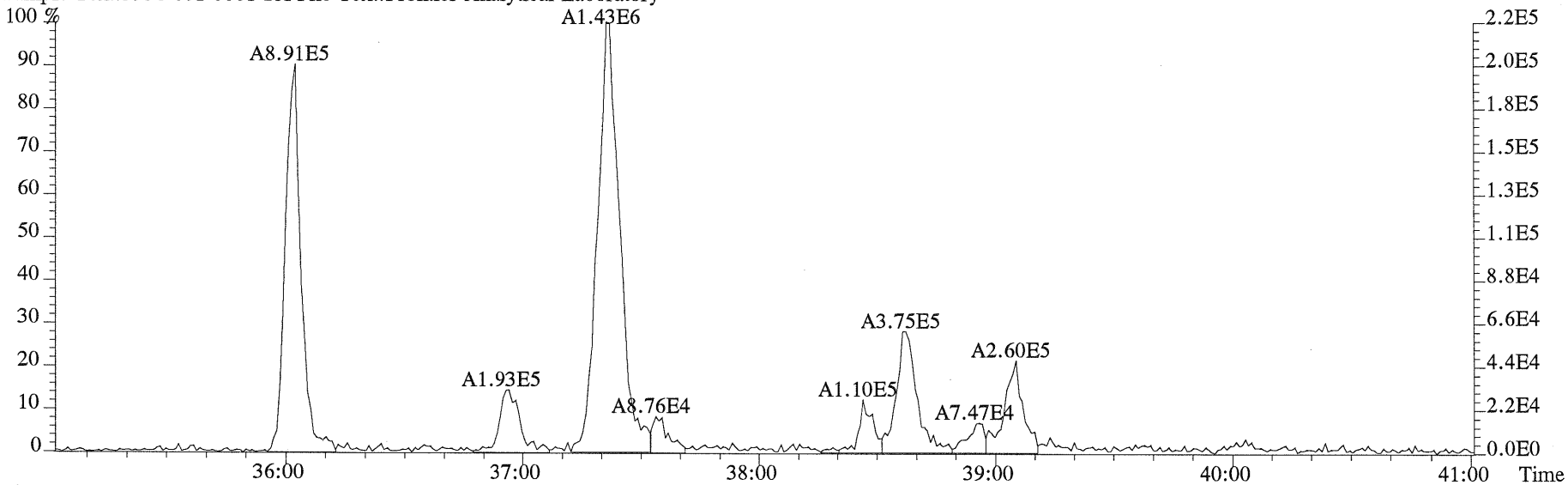
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



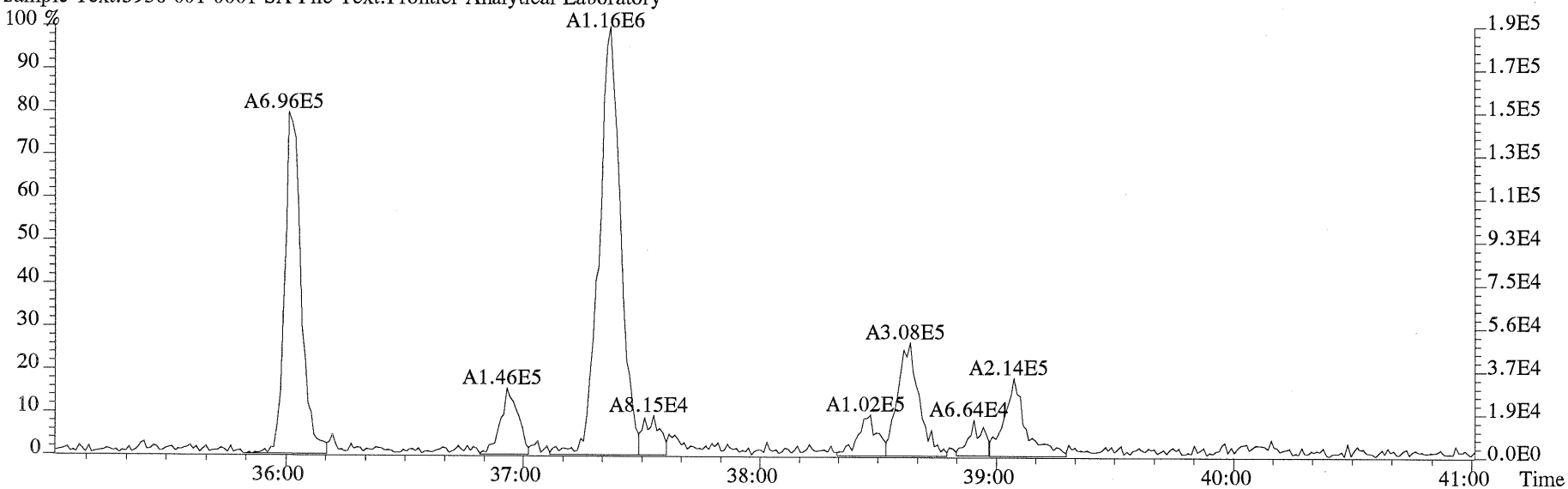
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



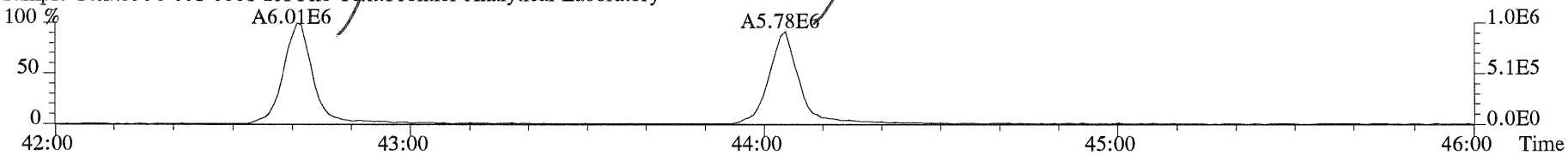
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



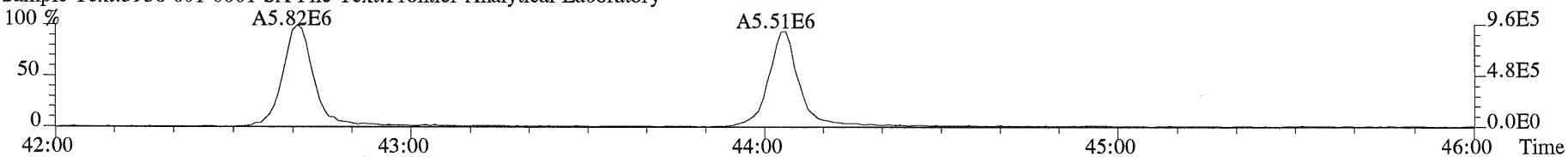
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



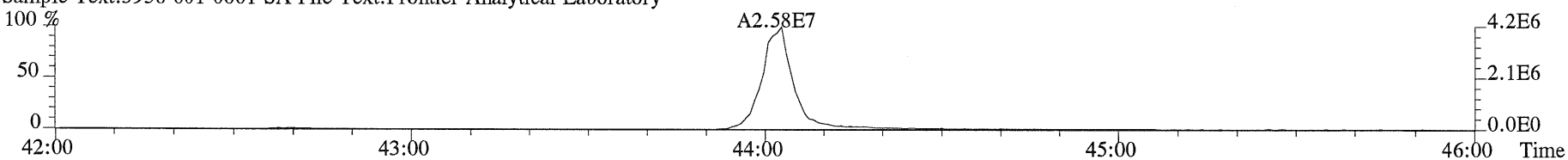
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



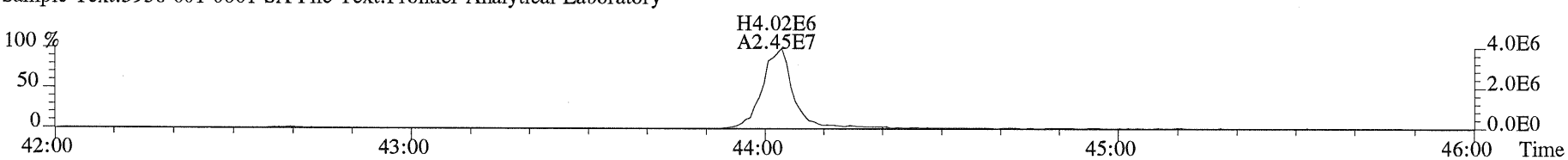
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



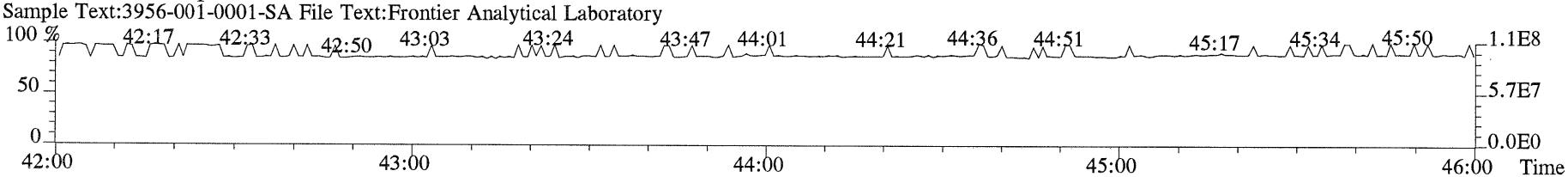
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



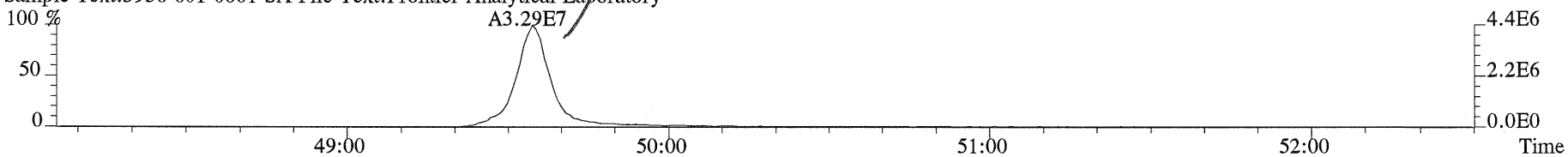
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



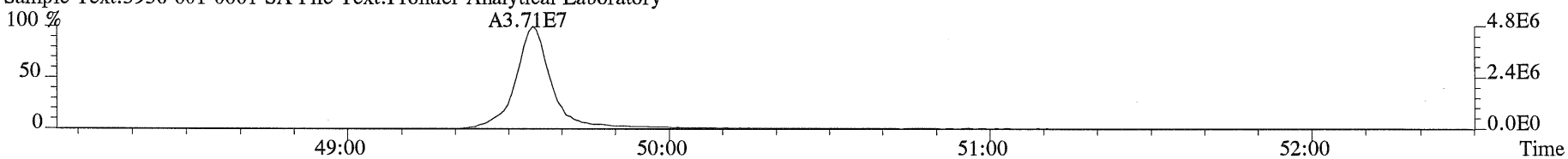
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



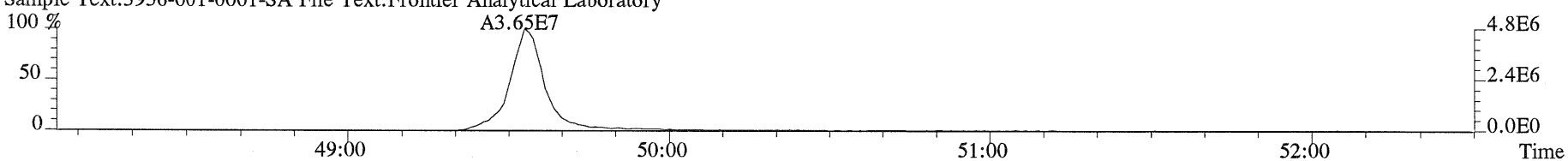
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



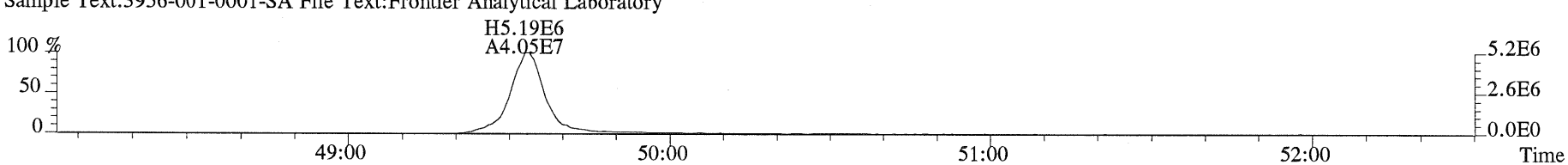
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



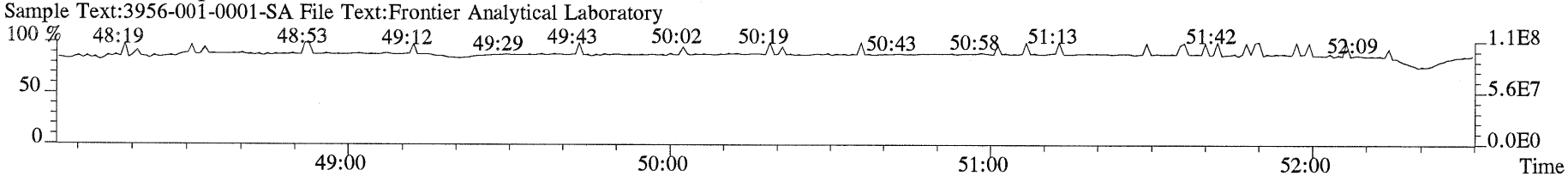
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



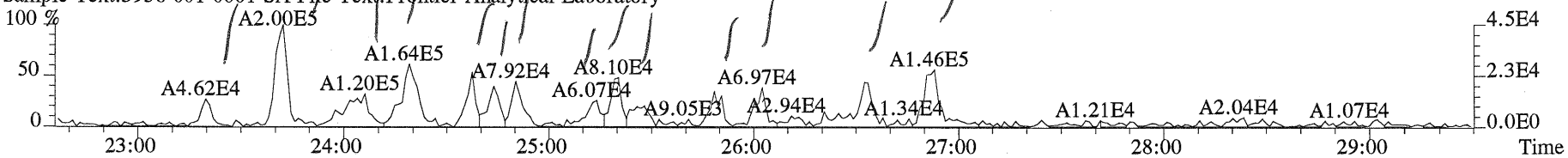
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



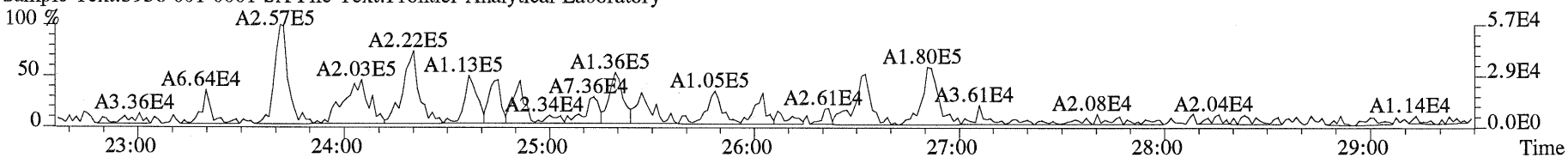
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



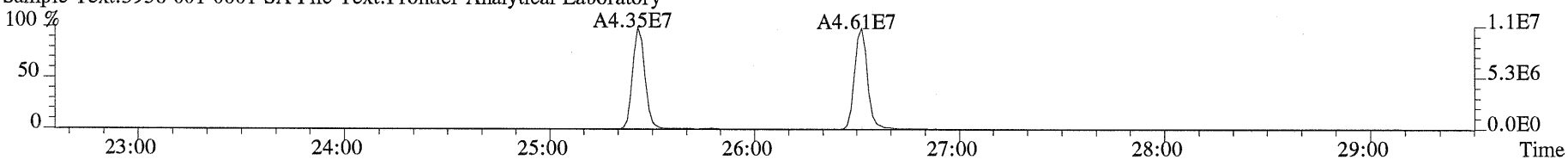
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



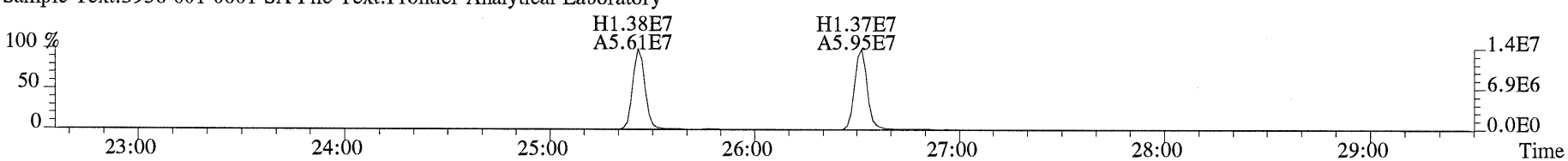
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



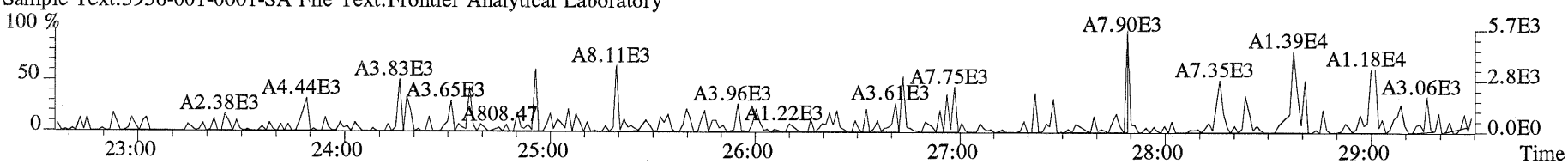
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



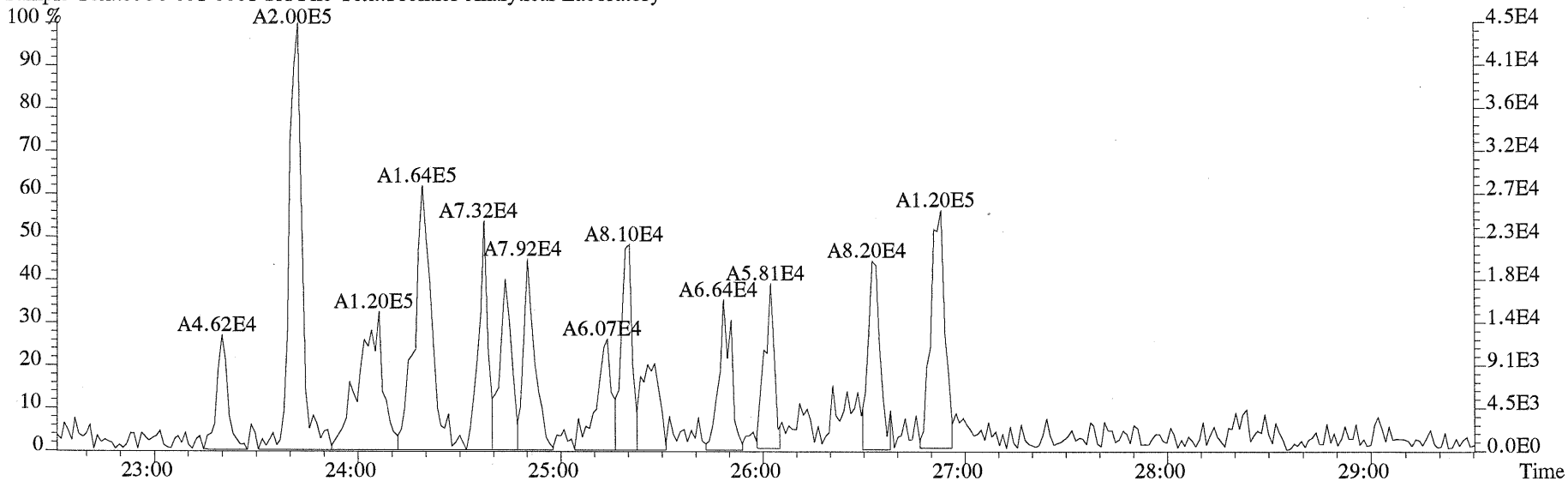
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



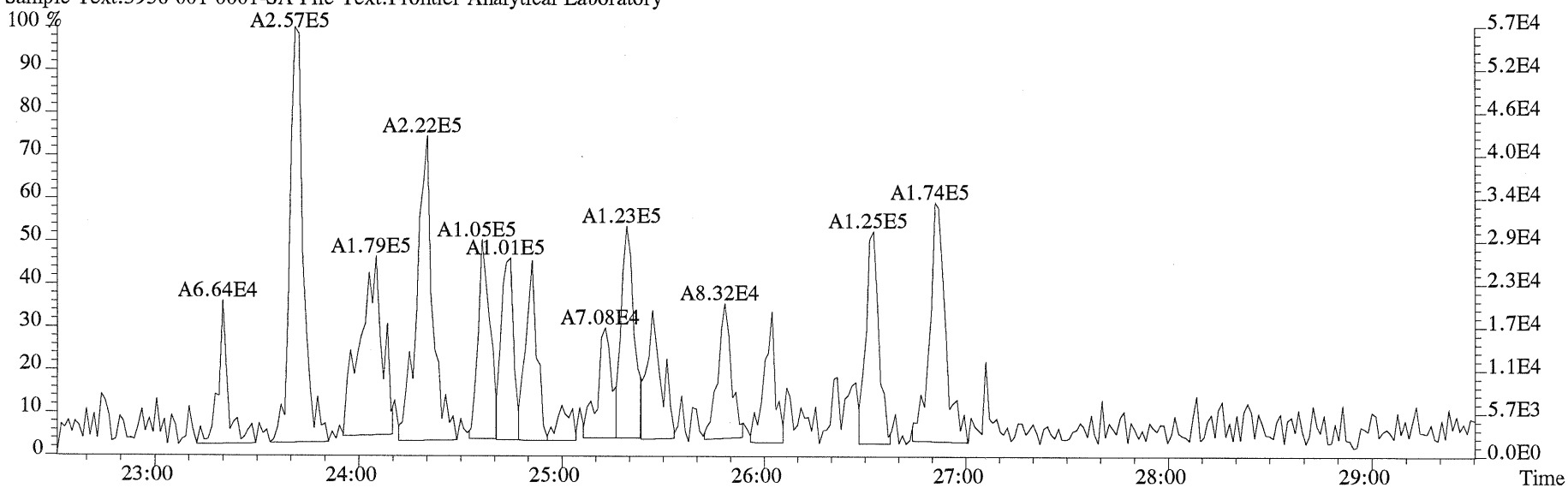
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



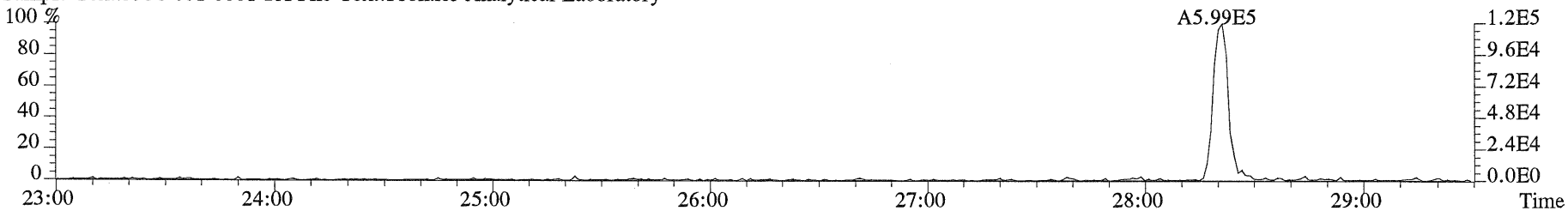
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



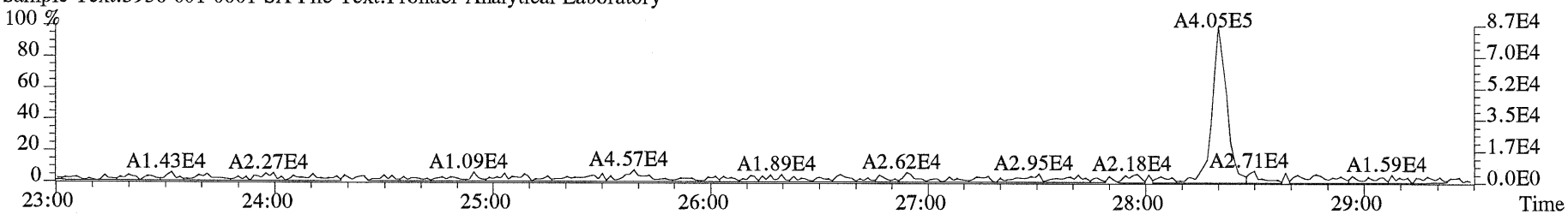
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



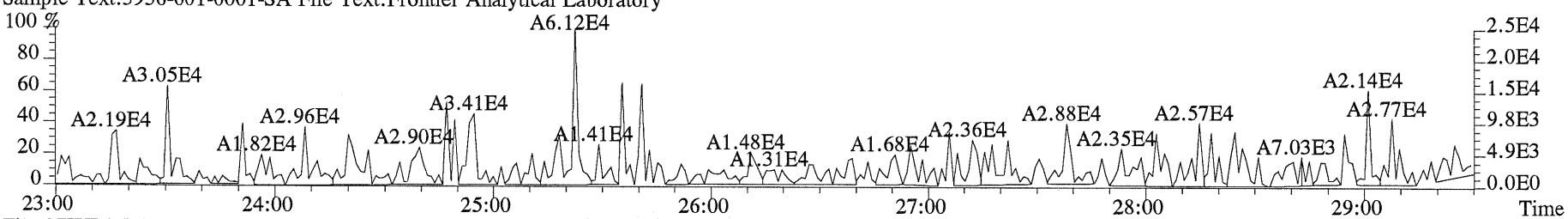
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



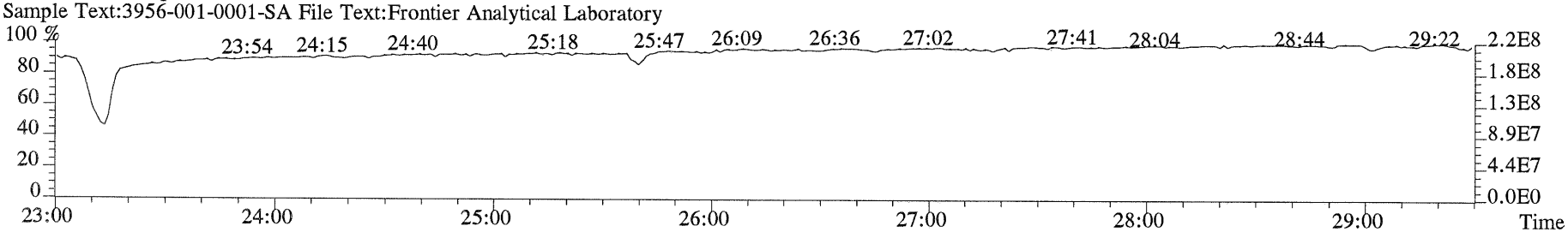
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



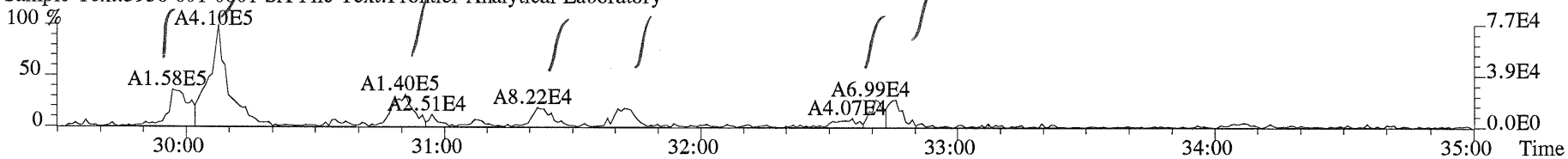
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



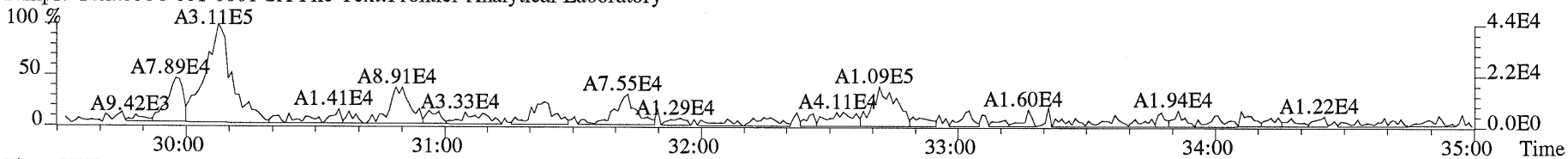
File:27JUL06M #1-390 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



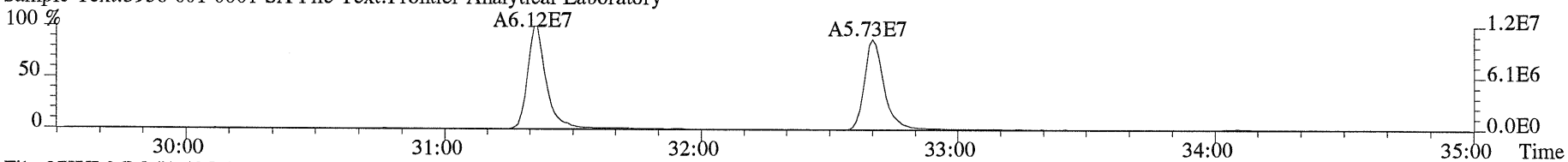
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



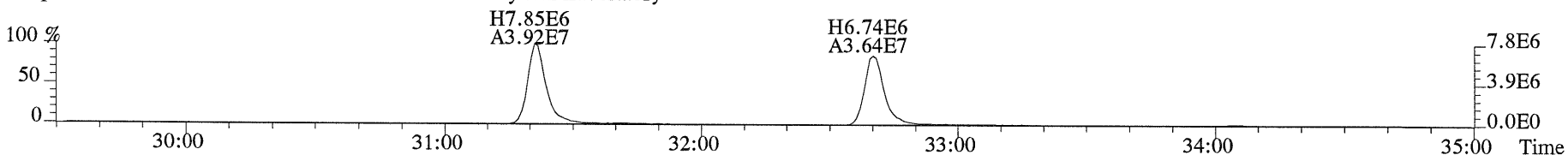
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



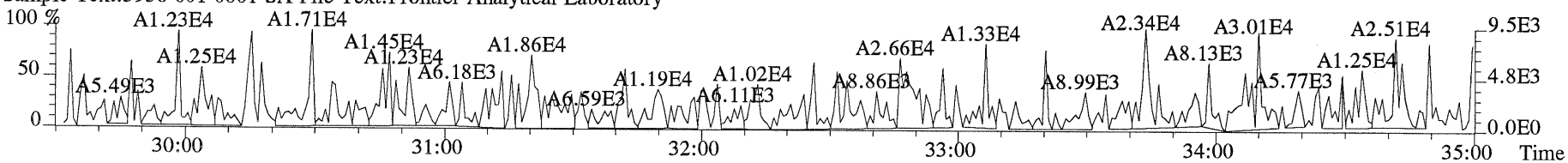
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



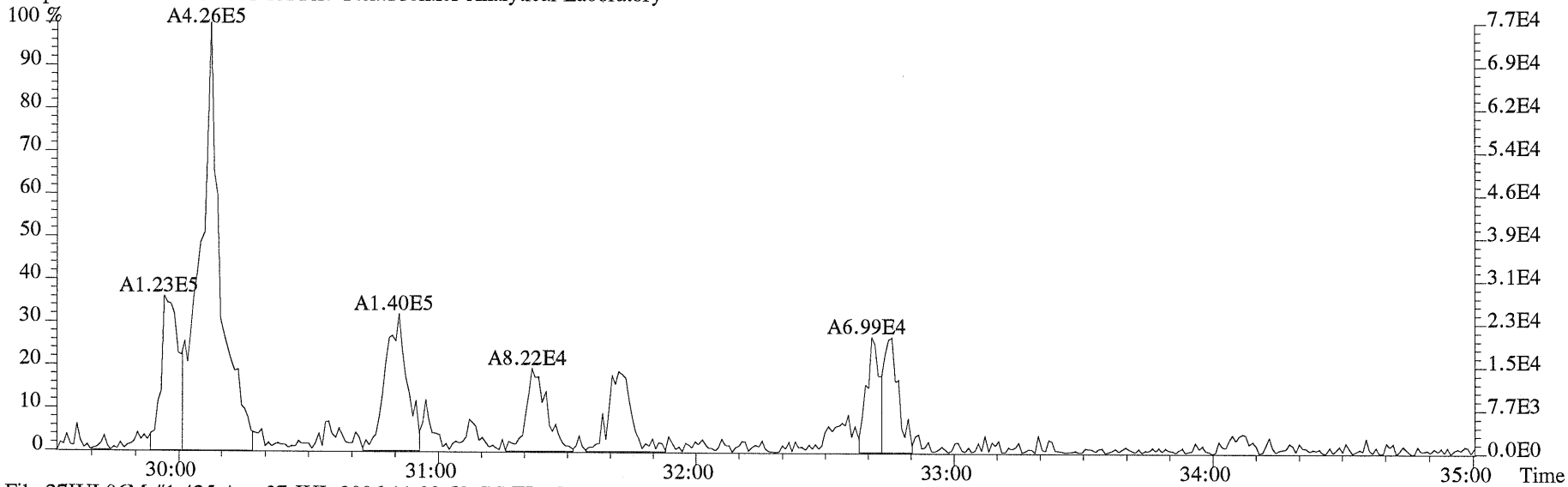
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



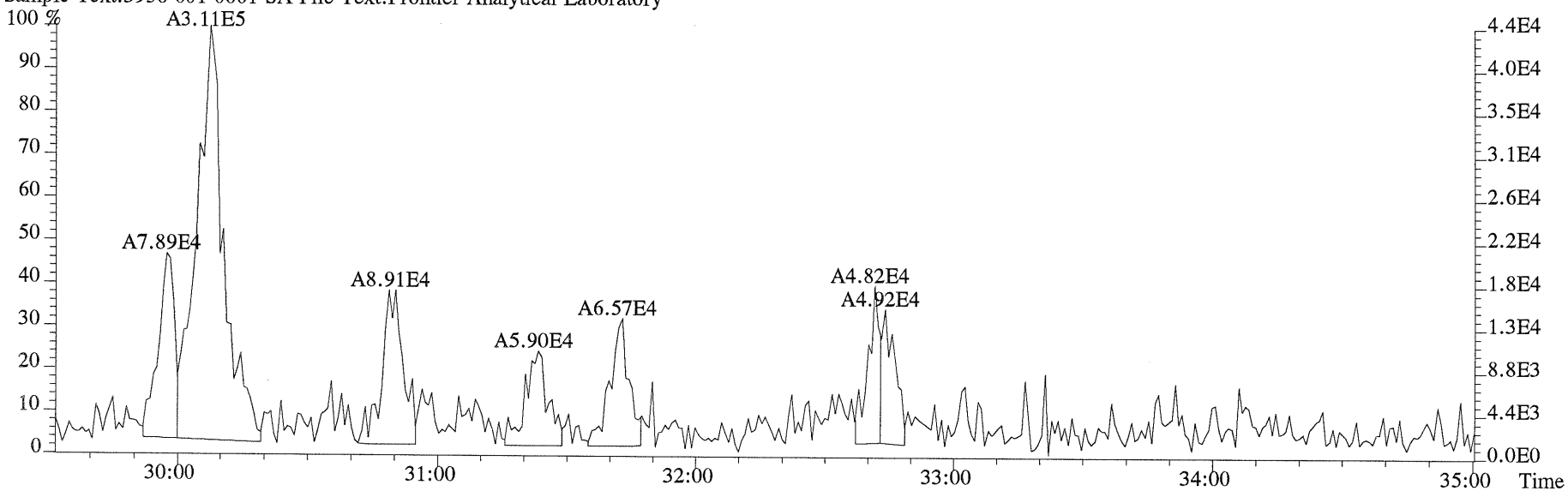
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



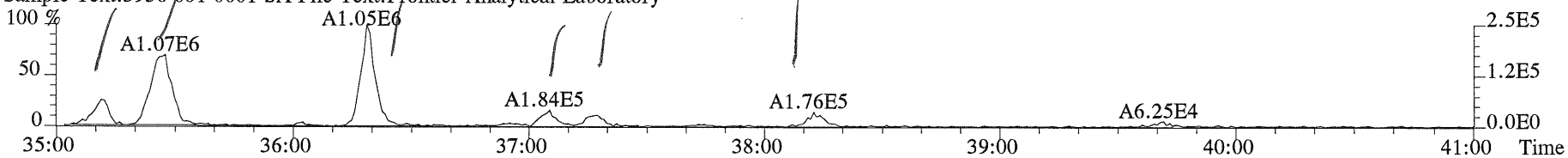
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



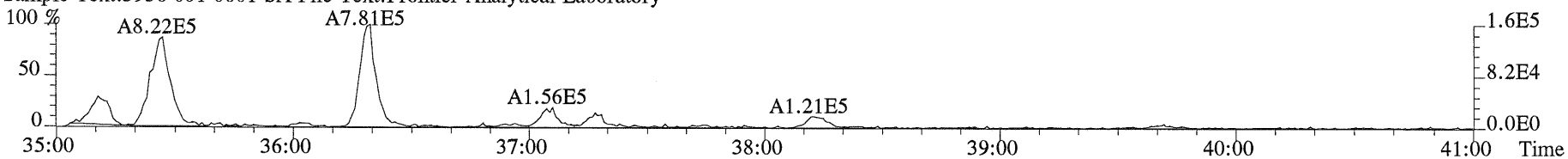
File:27JUL06M #1-425 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



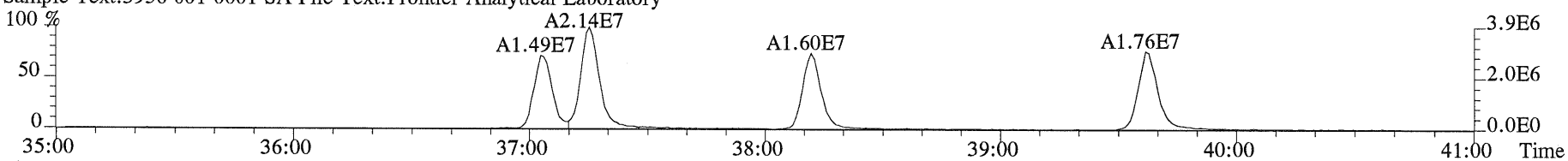
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



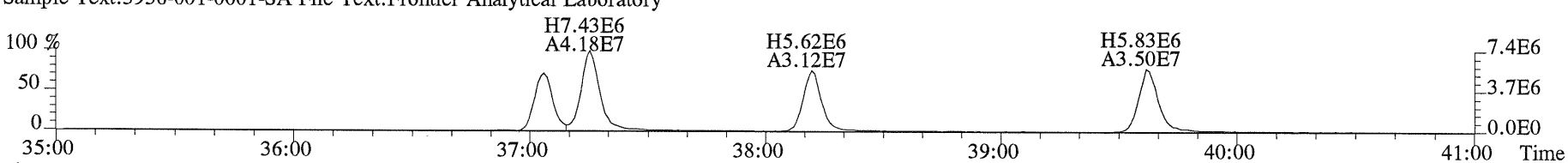
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



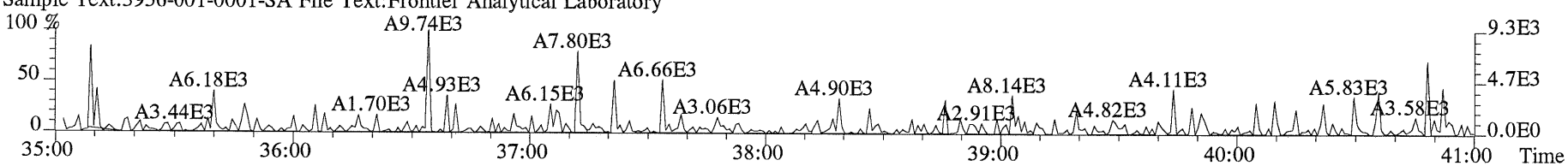
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



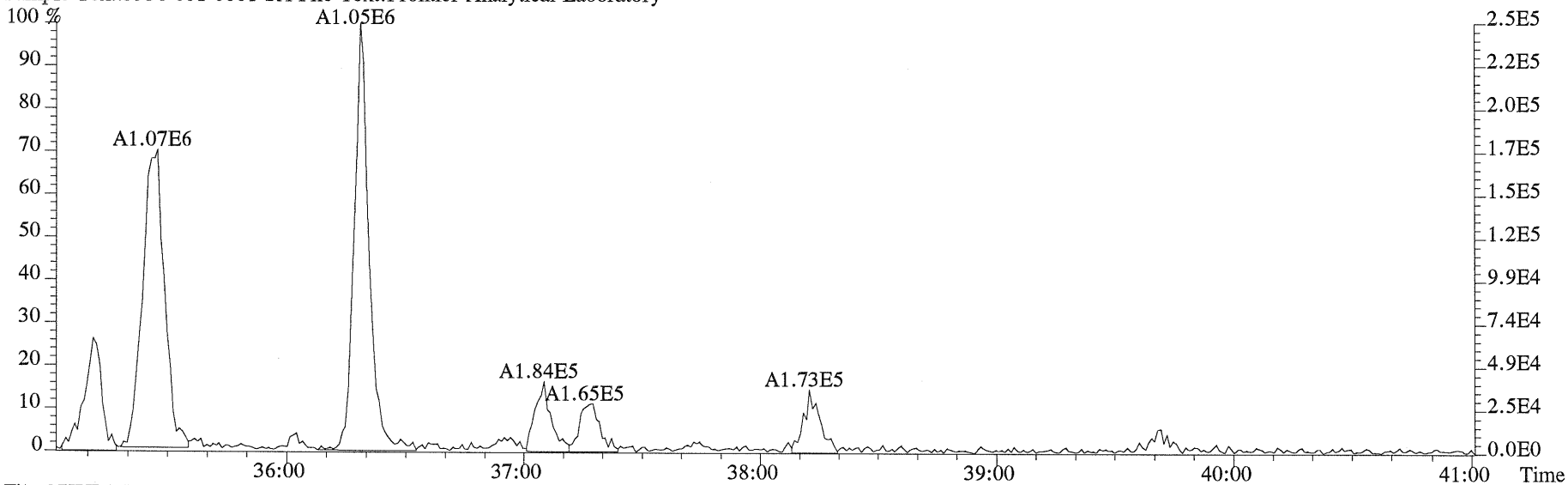
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



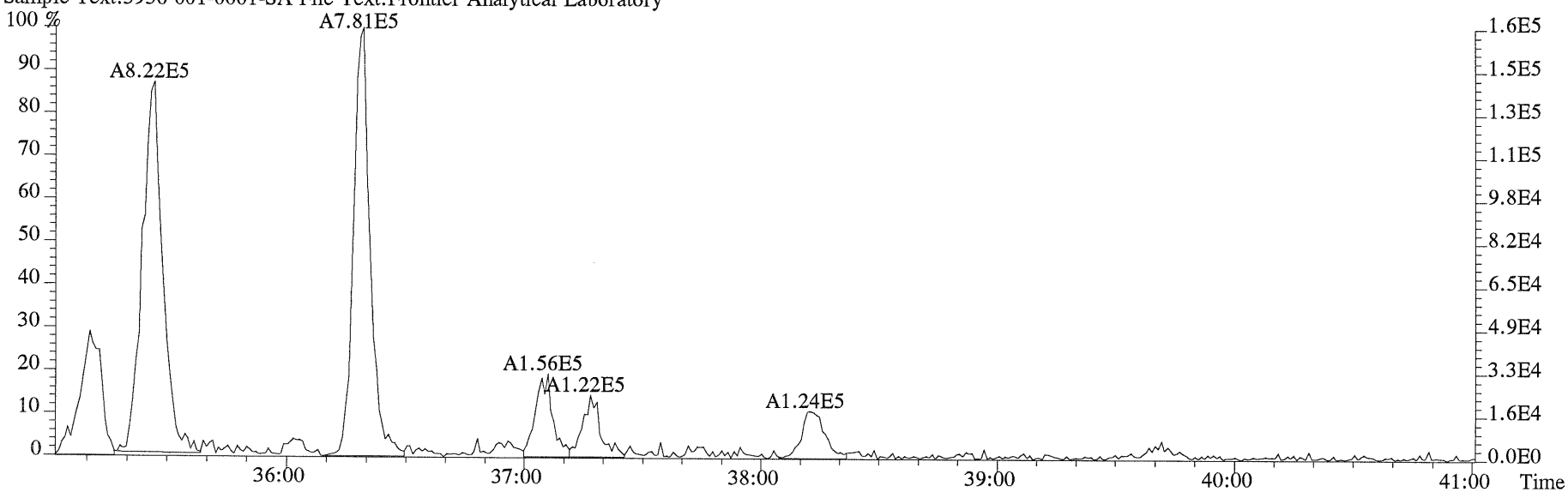
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



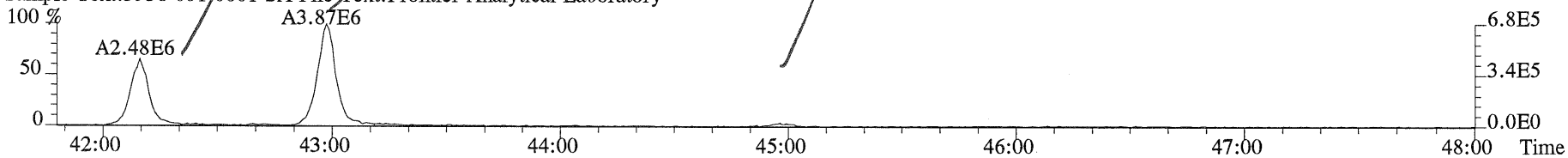
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



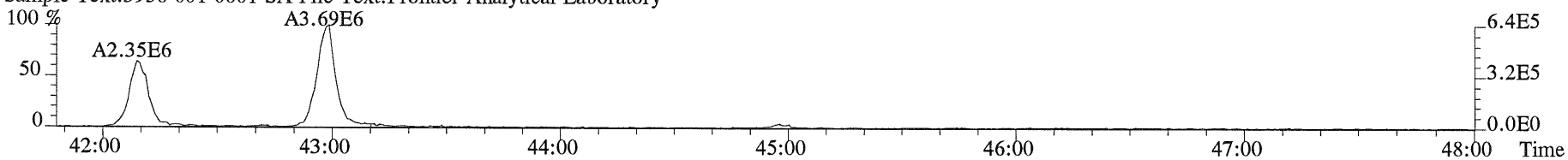
File:27JUL06M #1-464 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



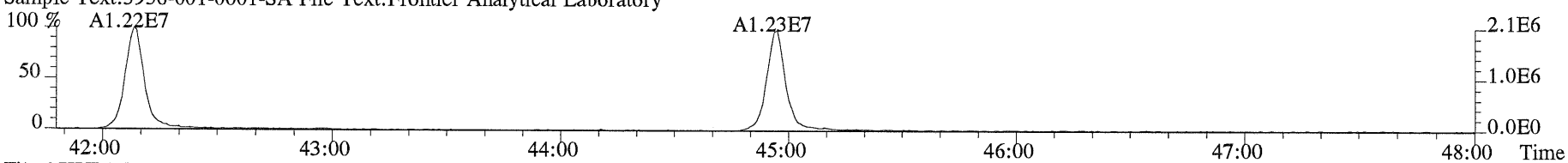
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



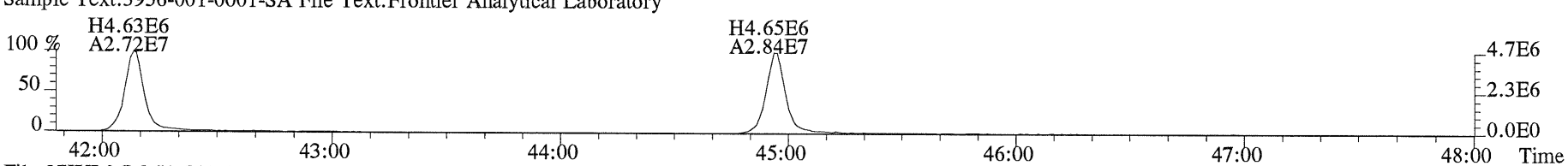
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



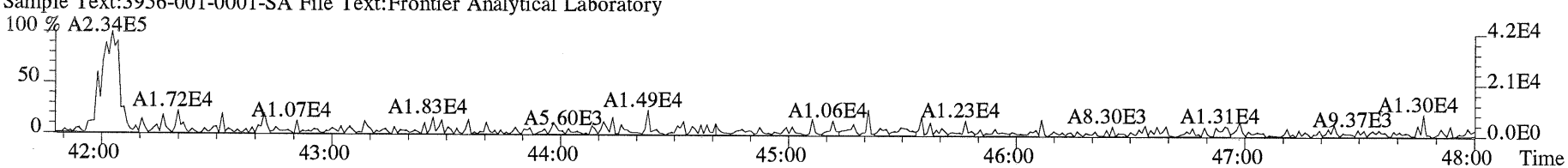
File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory

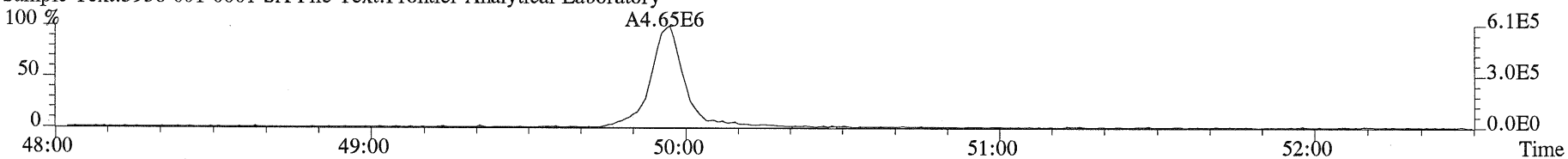


File:27JUL06M #1-541 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory

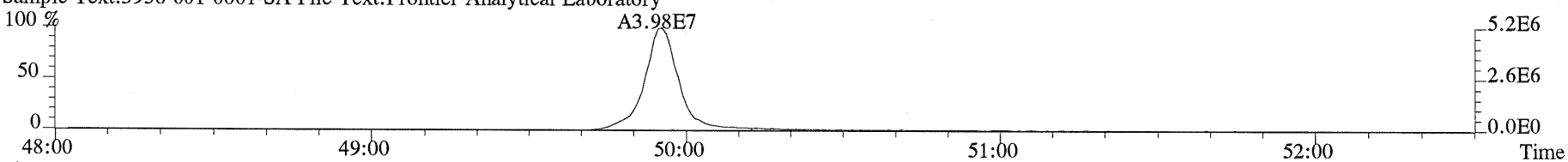


File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory

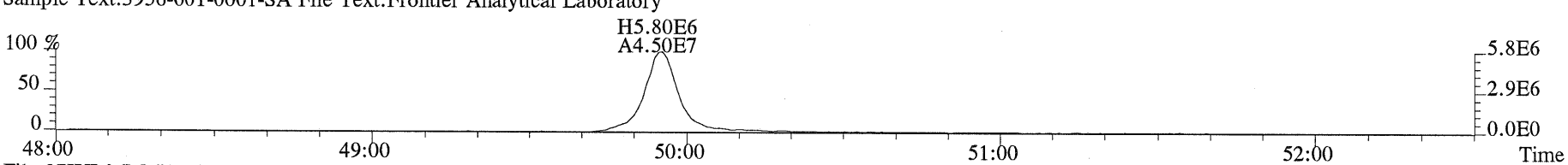
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



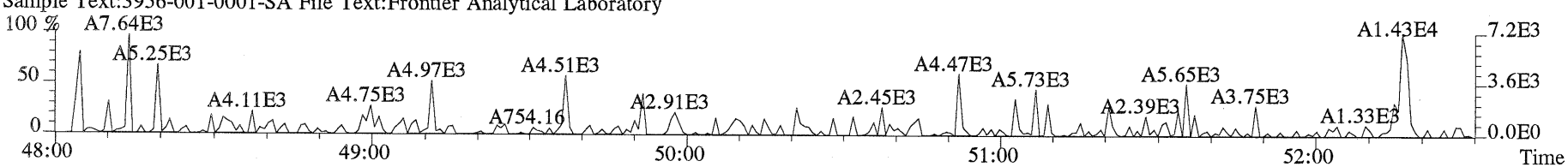
File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



File:27JUL06M #1-347 Acq:27-JUL-2006 11:28:52 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3956-001-0001-SA File Text:Frontier Analytical Laboratory



Frontier Analytical Laboratory

Data Filename: 05JUL06M

Analyte: PCDDFAL3-7-5-06 Cal: PCDDFAL3-7-5-06

Name	RRF	S. D.	%RSD	S2 RRF#1	S3 RRF#2	S4 RRF#3	S1 RRF#4	S5 RRF#5	S6 RRF#6
2,3,7,8-TCDD	1.10	0.0366	3.33 %	1.12	1.05	1.09	1.15	1.07	1.12
1,2,3,7,8-PeCDD	0.90	0.0305	3.37 %	0.89	0.85	0.92	0.92	0.90	0.94
1,2,3,4,7,8-HxCDD	0.96	0.0213	2.22 %	0.94	0.93	0.99	0.97	0.95	0.97
1,2,3,6,7,8-HxCDD	0.83	0.0371	4.48 %	0.83	0.76	0.84	0.86	0.82	0.87
1,2,3,7,8,9-HxCDD	0.77	0.0360	4.65 %	0.76	0.71	0.81	0.80	0.76	0.80
1,2,3,4,6,7,8-HpCDD	0.86	0.0460	5.34 %	0.87	0.77	0.87	0.90	0.86	0.89
OCDD	0.87	0.0269	3.09 %	0.86	0.82	0.88	0.89	0.88	0.90
2,3,7,8-TCDF	0.99	0.0254	2.55 %	0.99	0.96	1.01	1.03	0.97	1.01
1,2,3,7,8-PeCDF	0.80	0.0310	3.88 %	0.77	0.76	0.81	0.84	0.80	0.82
2,3,4,7,8-PeCDF	0.88	0.0318	3.63 %	0.85	0.83	0.90	0.91	0.87	0.90
1,2,3,4,7,8-HxCDF	1.42	0.0492	3.46 %	1.39	1.35	1.47	1.46	1.40	1.47
1,2,3,6,7,8-HxCDF	0.97	0.0437	4.51 %	0.91	0.93	1.01	1.02	0.96	1.00
2,3,4,6,7,8-HxCDF	1.26	0.0591	4.69 %	1.23	1.16	1.29	1.31	1.26	1.31
1,2,3,7,8,9-HxCDF	1.34	0.0455	3.40 %	1.33	1.26	1.35	1.37	1.32	1.38
1,2,3,4,6,7,8-HpCDF	1.28	0.0665	5.19 %	1.24	1.17	1.31	1.35	1.28	1.33
1,2,3,4,7,8,9-HpCDF	1.22	0.0519	4.27 %	1.22	1.12	1.21	1.28	1.22	1.26
OCDF	0.90	0.0392	4.37 %	0.88	0.83	0.91	0.94	0.90	0.92
13C-2,3,7,8-TCDD	1.00	0.0164	1.65 %	1.01	0.98	1.01	0.97	1.01	1.01
13C-1,2,3,7,8-PeCDD	0.96	0.0346	3.62 %	0.93	0.93	0.97	0.92	0.98	1.00
13C-1,2,3,4,7,8-HxCDD	0.90	0.0136	1.50 %	0.91	0.88	0.90	0.91	0.91	0.91
13C-1,2,3,6,7,8-HxCDD	1.09	0.0314	2.89 %	1.11	1.08	1.12	1.07	1.10	1.03
13C-1,2,3,4,6,7,8-HpCDD	0.96	0.0312	3.26 %	0.96	0.92	0.97	0.92	1.00	0.97
13C-OCDD	0.71	0.0368	5.16 %	0.73	0.67	0.72	0.66	0.75	0.74
13C-2,3,7,8-TCDF	0.94	0.0223	2.38 %	0.94	0.93	0.96	0.90	0.96	0.94
13C-1,2,3,7,8-PeCDF	1.00	0.0430	4.30 %	0.98	0.98	1.03	0.94	1.02	1.05
13C-2,3,4,7,8-PeCDF	0.94	0.0416	4.40 %	0.92	0.93	0.97	0.88	0.98	0.99
13C-1,2,3,4,7,8-HxCDF	0.86	0.0111	1.30 %	0.86	0.85	0.87	0.85	0.87	0.85
13C-1,2,3,6,7,8-HxCDF	1.23	0.0308	2.51 %	1.26	1.22	1.26	1.22	1.23	1.18
13C-2,3,4,6,7,8-HxCDF	0.88	0.0179	2.02 %	0.90	0.89	0.90	0.86	0.89	0.86
13C-1,2,3,7,8,9-HxCDF	0.98	0.0301	3.07 %	0.99	0.97	1.00	0.93	1.00	0.99
13C-1,2,3,4,6,7,8-HpCDF	0.86	0.0259	3.00 %	0.87	0.85	0.88	0.82	0.90	0.85
13C-1,2,3,4,7,8,9-HpCDF	0.70	0.0311	4.45 %	0.70	0.68	0.71	0.64	0.73	0.72
13C-OCDF	0.82	0.0530	6.47 %	0.83	0.78	0.84	0.74	0.88	0.86
37Cl-2,3,7,8-TCDD	0.79	0.0587	7.43 %	0.88	0.83	0.81	0.74	0.72	0.76
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4-TCDF	-	-	- %	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
Total Tetra-Dioxins	1.10	0.0366	3.33 %	1.12	1.05	1.09	1.15	1.07	1.12
Total Penta-Dioxins	0.90	0.0305	3.37 %	0.89	0.85	0.92	0.92	0.90	0.94
Total Hexa-Dioxins	0.85	0.0309	3.64 %	0.84	0.80	0.87	0.87	0.84	0.88
Total Hepta-Dioxins	0.86	0.0460	5.34 %	0.87	0.77	0.87	0.90	0.86	0.89
Total Tetra-Furans	0.99	0.0254	2.55 %	0.99	0.96	1.01	1.03	0.97	1.01
1st Fn. Tot Penta-Furans	0.84	0.0310	3.71 %	0.81	0.79	0.85	0.87	0.84	0.86
Total Penta-Furans	0.84	0.0310	3.71 %	0.81	0.79	0.85	0.87	0.84	0.86
Total Hexa-Furans	1.22	0.0470	3.84 %	1.19	1.15	1.25	1.26	1.21	1.27
Total Hepta-Furans	1.25	0.0588	4.70 %	1.23	1.15	1.27	1.32	1.25	1.30

Analyst: _____ Date: 7/6/06

Run #1 Filename 05JUL06M S: 2 Acquired: 5-JUL-06 12:45:16 Cal: PCDDFAL3-7-5-06
Client ID: ST070506MO Analyte: FAL ID: 1613 CSO 051212G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.25	5.87e+05	0.85 y	27:37	-	1.12	y
2	Unk	1,2,3,7,8-PeCDD	1.25	2.15e+06	1.65 y	33:25	-	0.893	y
3	Unk	1,2,3,4,7,8-HxCDD	1.25	1.64e+06	1.22 y	38:45	-	0.939	y
4	Unk	1,2,3,6,7,8-HxCDD	1.25	1.75e+06	1.31 y	38:55	-	0.827	y
5	Unk	1,2,3,7,8,9-HxCDD	1.25	1.48e+06	1.33 y	39:22	-	0.764	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	1.61e+06	1.11 y	44:19	-	0.872	y
7	Unk	OCDD	2.50	2.39e+06	0.89 y	49:53	-	0.861	y
8	Unk	2,3,7,8-TCDF	0.25	7.31e+05	0.66 y	26:52	-	0.988	y
9	Unk	1,2,3,7,8-PeCDF	1.25	2.97e+06	1.52 y	31:42	-	0.771	y
10	Unk	2,3,4,7,8-PeCDF	1.25	3.07e+06	1.46 y	33:01	-	0.847	y
11	Unk	1,2,3,4,7,8-HxCDF	1.25	2.28e+06	1.24 y	37:23	-	1.39	y
12	Unk	1,2,3,6,7,8-HxCDF	1.25	2.20e+06	1.27 y	37:34	-	0.913	y
13	Unk	2,3,4,6,7,8-HxCDF	1.25	2.11e+06	1.15 y	38:31	-	1.23	y
14	Unk	1,2,3,7,8,9-HxCDF	1.25	2.54e+06	1.30 y	39:57	-	1.33	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	2.06e+06	1.03 y	42:26	-	1.24	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	1.64e+06	1.07 y	45:16	-	1.22	y
17	Unk	OCDF	2.50	2.77e+06	0.87 y	50:15	-	0.876	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.10e+08	0.78 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.93e+08	1.59 y	33:24	-	0.930	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.40e+08	1.27 y	38:44	-	0.914	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.70e+08	1.27 y	38:54	-	1.11	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.47e+08	1.07 y	44:18	-	0.964	y
23	IS	13C-OCDD	200.00	2.22e+08	0.92 y	49:50	-	0.726	y
24	IS	13C-2,3,7,8-TCDF	100.00	2.96e+08	0.79 y	26:52	-	0.939	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.08e+08	1.59 y	31:41	-	0.976	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	2.90e+08	1.60 y	32:60	-	0.920	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.31e+08	0.54 y	37:22	-	0.860	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.93e+08	0.53 y	37:33	-	1.26	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.37e+08	0.54 y	38:30	-	0.895	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.52e+08	0.53 y	39:56	-	0.995	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.33e+08	0.45 y	42:25	-	0.871	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.08e+08	0.44 y	45:13	-	0.705	y
33	IS	13C-OCDF	200.00	2.53e+08	0.90 y	50:14	-	0.827	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.25	4.54e+05		27:37	-	0.876	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.07e+08	0.79 y	27:02	2.07e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.15e+08	0.78 y	25:47	3.15e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.53e+08	1.28 y	39:21	1.53e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.12	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.893	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.840	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.872	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.988	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.808	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.808	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.19	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.23	y

Analyst: _____ Date: 7/6/06

Run #2 Filename 05JUL06M S: 3 Acquired: 5-JUL-06 13:40:39 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M1 Analyte: FAL ID: 1613 CS1 051212H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.50	8.69e+05	0.85 y	27:38	-	1.05	y
2	Unk	1,2,3,7,8-PeCDD	2.50	3.34e+06	1.53 y	33:25	-	0.850	y
3	Unk	1,2,3,4,7,8-HxCDD	2.50	2.62e+06	1.32 y	38:45	-	0.933	y
4	Unk	1,2,3,6,7,8-HxCDD	2.50	2.64e+06	1.20 y	38:55	-	0.763	y
5	Unk	1,2,3,7,8,9-HxCDD	2.50	2.23e+06	1.25 y	39:23	-	0.712	y
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	2.28e+06	1.14 y	44:20	-	0.771	y
7	Unk	OCDD	5.00	3.55e+06	0.85 y	49:52	-	0.823	y
8	Unk	2,3,7,8-TCDF	0.50	1.13e+06	0.75 y	26:53	-	0.962	y
9	Unk	1,2,3,7,8-PeCDF	2.50	4.67e+06	1.41 y	31:42	-	0.756	y
10	Unk	2,3,4,7,8-PeCDF	2.50	4.85e+06	1.51 y	33:01	-	0.829	y
11	Unk	1,2,3,4,7,8-HxCDF	2.50	3.70e+06	1.24 y	37:23	-	1.35	y
12	Unk	1,2,3,6,7,8-HxCDF	2.50	3.61e+06	1.31 y	37:34	-	0.926	y
13	Unk	2,3,4,6,7,8-HxCDF	2.50	3.28e+06	1.31 y	38:32	-	1.16	y
14	Unk	1,2,3,7,8,9-HxCDF	2.50	3.91e+06	1.34 y	39:57	-	1.26	y
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	3.19e+06	1.04 y	42:27	-	1.17	y
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	2.46e+06	1.08 y	45:16	-	1.12	y
17	Unk	OCDF	5.00	4.15e+06	0.91 y	50:16	-	0.831	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	1.66e+08	0.81 y	27:36	-	0.981	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.57e+08	1.58 y	33:23	-	0.928	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.12e+08	1.26 y	38:44	-	0.877	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.38e+08	1.25 y	38:54	-	1.08	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.18e+08	1.06 y	44:18	-	0.924	y
23	IS	13C-OCDD	200.00	1.73e+08	0.90 y	49:51	-	0.674	y
24	IS	13C-2,3,7,8-TCDF	100.00	2.35e+08	0.81 y	26:51	-	0.930	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	2.47e+08	1.60 y	31:40	-	0.977	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	2.34e+08	1.60 y	32:59	-	0.926	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.09e+08	0.53 y	37:21	-	0.855	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.56e+08	0.53 y	37:34	-	1.22	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.13e+08	0.53 y	38:30	-	0.885	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.24e+08	0.52 y	39:56	-	0.971	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.09e+08	0.44 y	42:25	-	0.849	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	8.74e+07	0.45 y	45:14	-	0.683	y
33	IS	13C-OCDF	200.00	2.00e+08	0.91 y	50:14	-	0.779	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.50	7.03e+05		27:37	-	0.830	y
35	RS	13C-1,2,3,4-TCDD	100.00	1.69e+08	0.80 y	27:02	1.69e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	2.53e+08	0.79 y	25:47	2.53e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.28e+08	1.27 y	39:21	1.28e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.05	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.850	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.797	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.771	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.962	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.792	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.792	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.15	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.15	y

Analyst: _____ Date: 7/6/06

Run #3 Filename 05JUL06M S: 4 Acquired: 5-JUL-06 14:36:03 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M2 Analyte: FAL ID: 1613 CS2 051212I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	2.00	4.31e+06	0.81 y	27:37	-	1.09	y
2	Unk	1,2,3,7,8-PeCDD	10.00	1.75e+07	1.57 y	33:26	-	0.917	y
3	Unk	1,2,3,4,7,8-HxCDD	10.00	1.38e+07	1.27 y	38:46	-	0.991	y
4	Unk	1,2,3,6,7,8-HxCDD	10.00	1.45e+07	1.28 y	38:56	-	0.843	y
5	Unk	1,2,3,7,8,9-HxCDD	10.00	1.25e+07	1.24 y	39:23	-	0.806	y
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	1.31e+07	1.01 y	44:20	-	0.874	y
7	Unk	OCDD	20.00	1.96e+07	0.90 y	49:52	-	0.884	y
8	Unk	2,3,7,8-TCDF	2.00	5.66e+06	0.74 y	26:52	-	1.01	y
9	Unk	1,2,3,7,8-PeCDF	10.00	2.43e+07	1.54 y	31:42	-	0.806	y
10	Unk	2,3,4,7,8-PeCDF	10.00	2.54e+07	1.53 y	33:01	-	0.899	y
11	Unk	1,2,3,4,7,8-HxCDF	10.00	1.97e+07	1.23 y	37:23	-	1.47	y
12	Unk	1,2,3,6,7,8-HxCDF	10.00	1.94e+07	1.24 y	37:34	-	1.01	y
13	Unk	2,3,4,6,7,8-HxCDF	10.00	1.79e+07	1.25 y	38:32	-	1.29	y
14	Unk	1,2,3,7,8,9-HxCDF	10.00	2.08e+07	1.21 y	39:58	-	1.35	y
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	1.78e+07	1.06 y	42:27	-	1.31	y
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	1.33e+07	1.00 y	45:15	-	1.21	y
17	Unk	OCDF	20.00	2.35e+07	0.91 y	50:15	-	0.913	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	1.97e+08	0.78 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.91e+08	1.58 y	33:23	-	0.974	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.39e+08	1.27 y	38:44	-	0.905	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.72e+08	1.25 y	38:54	-	1.12	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.49e+08	1.06 y	44:18	-	0.972	y
23	IS	13C-OCDD	200.00	2.21e+08	0.89 y	49:51	-	0.719	y
24	IS	13C-2,3,7,8-TCDF	100.00	2.80e+08	0.79 y	26:51	-	0.959	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.02e+08	1.59 y	31:41	-	1.03	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	2.82e+08	1.60 y	33:00	-	0.966	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.34e+08	0.53 y	37:22	-	0.874	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.93e+08	0.53 y	37:34	-	1.26	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.39e+08	0.53 y	38:30	-	0.902	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.55e+08	0.53 y	39:57	-	1.00	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.35e+08	0.45 y	42:25	-	0.880	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.10e+08	0.44 y	45:14	-	0.712	y
33	IS	13C-OCDF	200.00	2.58e+08	0.90 y	50:15	-	0.838	y
34	C/Up	37Cl-2,3,7,8-TCDD	2.00	3.16e+06		27:38	-	0.805	y
35	RS	13C-1,2,3,4-TCDD	100.00	1.96e+08	0.81 y	27:01	1.96e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	2.92e+08	0.78 y	25:47	2.92e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.54e+08	1.26 y	39:21	1.54e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.09	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.917	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.875	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.874	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.01	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.851	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.851	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.25	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.27	y

Analyst: _____ Date: 7/6/06

Run #4 Filename 05JUL06M S: 1 Acquired: 5-JUL-06 11:49:47 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M3 Analyte: FAL ID: 1613 CS3 051212J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	10.00	1.46e+07	0.77 y	27:37	-	1.15	y
2	Unk	1,2,3,7,8-PeCDD	50.00	5.50e+07	1.54 y	33:25	-	0.917	y
3	Unk	1,2,3,4,7,8-HxCDD	50.00	4.12e+07	1.27 y	38:45	-	0.970	y
4	Unk	1,2,3,6,7,8-HxCDD	50.00	4.30e+07	1.21 y	38:55	-	0.856	y
5	Unk	1,2,3,7,8,9-HxCDD	50.00	3.71e+07	1.22 y	39:22	-	0.800	y
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	3.85e+07	1.05 y	44:19	-	0.897	y
7	Unk	OCDD	100.00	5.49e+07	0.89 y	49:51	-	0.885	y
8	Unk	2,3,7,8-TCDF	10.00	1.80e+07	0.79 y	26:53	-	1.03	y
9	Unk	1,2,3,7,8-PeCDF	50.00	7.71e+07	1.55 y	31:42	-	0.841	y
10	Unk	2,3,4,7,8-PeCDF	50.00	7.81e+07	1.56 y	33:01	-	0.908	y
11	Unk	1,2,3,4,7,8-HxCDF	50.00	5.80e+07	1.25 y	37:22	-	1.46	y
12	Unk	1,2,3,6,7,8-HxCDF	50.00	5.78e+07	1.24 y	37:34	-	1.02	y
13	Unk	2,3,4,6,7,8-HxCDF	50.00	5.27e+07	1.25 y	38:31	-	1.31	y
14	Unk	1,2,3,7,8,9-HxCDF	50.00	5.95e+07	1.23 y	39:57	-	1.37	y
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	5.20e+07	1.04 y	42:26	-	1.35	y
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	3.85e+07	1.04 y	45:15	-	1.28	y
17	Unk	OCDF	100.00	6.49e+07	0.93 y	50:15	-	0.943	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	1.27e+08	0.79 y	27:36	-	0.974	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.20e+08	1.59 y	33:23	-	0.919	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	8.50e+07	1.26 y	38:44	-	0.908	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.01e+08	1.28 y	38:53	-	1.07	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	8.58e+07	1.07 y	44:18	-	0.917	y
23	IS	13C-OCDD	200.00	1.24e+08	0.91 y	49:51	-	0.662	y
24	IS	13C-2,3,7,8-TCDF	100.00	1.75e+08	0.79 y	26:52	-	0.898	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	1.83e+08	1.58 y	31:40	-	0.939	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	1.72e+08	1.62 y	32:59	-	0.881	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	7.96e+07	0.53 y	37:21	-	0.850	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.14e+08	0.54 y	37:33	-	1.22	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	8.06e+07	0.53 y	38:29	-	0.861	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	8.66e+07	0.52 y	39:56	-	0.925	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	7.71e+07	0.44 y	42:25	-	0.823	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	6.03e+07	0.45 y	45:14	-	0.644	y
33	IS	13C-OCDF	200.00	1.38e+08	0.91 y	50:14	-	0.736	y
34	C/Up	37Cl-2,3,7,8-TCDD	10.00	9.65e+06		27:38	-	0.739	y
35	RS	13C-1,2,3,4-TCDD	100.00	1.31e+08	0.81 y	27:01	1.31e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	1.95e+08	0.79 y	25:47	1.95e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	9.36e+07	1.26 y	39:21	9.36e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.15	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.917	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.872	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.897	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.03	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.873	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.873	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.27	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.32	y

Analyst: _____ Date: 7/6/06

Run #5 Filename 05JUL06M S: 5 Acquired: 5-JUL-06 15:31:26 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M4 Analyte: FAL ID: 1613 CS4 051212K

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	40.00	9.29e+07	0.78 y	27:37	-	1.07	y
2	Unk	1,2,3,7,8-PeCDD	200.00	3.80e+08	1.58 y	33:25	-	0.901	y
3	Unk	1,2,3,4,7,8-HxCDD	200.00	3.00e+08	1.26 y	38:45	-	0.955	y
4	Unk	1,2,3,6,7,8-HxCDD	200.00	3.08e+08	1.25 y	38:55	-	0.816	y
5	Unk	1,2,3,7,8,9-HxCDD	200.00	2.64e+08	1.24 y	39:22	-	0.765	y
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	2.94e+08	1.05 y	44:20	-	0.859	y
7	Unk	OCDD	400.00	4.54e+08	0.87 y	49:52	-	0.876	y
8	Unk	2,3,7,8-TCDF	40.00	1.19e+08	0.78 y	26:53	-	0.968	y
9	Unk	1,2,3,7,8-PeCDF	200.00	5.28e+08	1.58 y	31:41	-	0.802	y
10	Unk	2,3,4,7,8-PeCDF	200.00	5.48e+08	1.57 y	33:01	-	0.872	y
11	Unk	1,2,3,4,7,8-HxCDF	200.00	4.20e+08	1.25 y	37:23	-	1.40	y
12	Unk	1,2,3,6,7,8-HxCDF	200.00	4.06e+08	1.25 y	37:35	-	0.958	y
13	Unk	2,3,4,6,7,8-HxCDF	200.00	3.88e+08	1.24 y	38:31	-	1.26	y
14	Unk	1,2,3,7,8,9-HxCDF	200.00	4.56e+08	1.24 y	39:58	-	1.32	y
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	3.95e+08	1.04 y	42:26	-	1.28	y
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	3.05e+08	1.05 y	45:15	-	1.22	y
17	Unk	OCDF	400.00	5.43e+08	0.93 y	50:16	-	0.898	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.16e+08	0.78 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.11e+08	1.59 y	33:24	-	0.985	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.57e+08	1.27 y	38:44	-	0.913	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.89e+08	1.25 y	38:54	-	1.10	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.71e+08	1.05 y	44:18	-	0.997	y
23	IS	13C-OCDD	200.00	2.59e+08	0.90 y	49:51	-	0.753	y
24	IS	13C-2,3,7,8-TCDF	100.00	3.08e+08	0.80 y	26:52	-	0.958	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.29e+08	1.60 y	31:41	-	1.02	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.14e+08	1.59 y	32:60	-	0.978	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.50e+08	0.53 y	37:22	-	0.871	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.12e+08	0.52 y	37:33	-	1.23	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.54e+08	0.53 y	38:30	-	0.895	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.72e+08	0.52 y	39:56	-	1.00	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.54e+08	0.46 y	42:25	-	0.897	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.25e+08	0.44 y	45:14	-	0.729	y
33	IS	13C-OCDF	200.00	3.03e+08	0.90 y	50:14	-	0.880	y
34	C/Up	37Cl-2,3,7,8-TCDD	40.00	6.18e+07		27:37	-	0.721	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.14e+08	0.81 y	27:02	2.14e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.21e+08	0.79 y	25:46	3.21e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.72e+08	1.27 y	39:21	1.72e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.07	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.901	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.841	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.859	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.968	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.836	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.836	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.21	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.25	y

Analyst: _____ Date: 7/6/06

Run #6 Filename 05JUL06M S: 6 Acquired: 5-JUL-06 16:26:53 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M5 Analyte: PCDDFAL3-7-5-06 FAL ID: 1613 CS5 051212L

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	200.00	5.19e+08	0.78 y	27:38	-	1.12	y
2	Unk	1,2,3,7,8-PeCDD	1000.00	2.17e+09	1.57 y	33:26	-	0.940	y
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	1.72e+09	1.26 y	38:46	-	0.966	y
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	1.75e+09	1.26 y	38:56	-	0.868	y
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	1.52e+09	1.25 y	39:23	-	0.801	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	1.70e+09	1.03 y	44:20	-	0.890	y
7	Unk	OCDD	2000.00	2.62e+09	0.91 y	49:53	-	0.900	y
8	Unk	2,3,7,8-TCDF	200.00	6.59e+08	0.78 y	26:53	-	1.01	y
9	Unk	1,2,3,7,8-PeCDF	1000.00	3.01e+09	1.56 y	31:42	-	0.819	y
10	Unk	2,3,4,7,8-PeCDF	1000.00	3.10e+09	1.56 y	33:01	-	0.896	y
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	2.44e+09	1.24 y	37:23	-	1.47	y
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	2.31e+09	1.24 y	37:35	-	0.998	y
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	2.22e+09	1.25 y	38:32	-	1.31	y
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	2.69e+09	1.26 y	39:58	-	1.38	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	2.23e+09	1.04 y	42:27	-	1.33	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	1.78e+09	1.04 y	45:16	-	1.26	y
17	Unk	OCDF	2000.00	3.09e+09	0.92 y	50:16	-	0.921	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.32e+08	0.79 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.31e+08	1.58 y	33:24	-	1.00	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.78e+08	1.27 y	38:44	-	0.907	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.02e+08	1.27 y	38:54	-	1.03	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.91e+08	1.06 y	44:19	-	0.973	y
23	IS	13C-OCDD	200.00	2.91e+08	0.91 y	49:51	-	0.743	y
24	IS	13C-2,3,7,8-TCDF	100.00	3.28e+08	0.80 y	26:51	-	0.939	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.67e+08	1.60 y	31:41	-	1.05	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.45e+08	1.61 y	33:00	-	0.990	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.66e+08	0.53 y	37:22	-	0.847	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.31e+08	0.53 y	37:34	-	1.18	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.69e+08	0.53 y	38:30	-	0.862	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.94e+08	0.53 y	39:56	-	0.992	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.68e+08	0.46 y	42:26	-	0.855	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.41e+08	0.45 y	45:14	-	0.722	y
33	IS	13C-OCDF	200.00	3.36e+08	0.90 y	50:15	-	0.857	y
34	C/Up	37Cl-2,3,7,8-TCDD	200.00	3.53e+08		27:38	-	0.764	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.31e+08	0.80 y	27:02	2.31e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.49e+08	0.79 y	25:47	3.49e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.96e+08	1.25 y	39:21	1.96e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.12	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.940	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.876	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.890	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.01	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.856	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.856	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.27	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.30	y

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS3 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
NATIVE ANALYTES								
2,3,7,8-TCDD	1.12	1.05	1.09	1.15	1.07	1.12	1.10	3.33
1,2,3,7,8-PeCDD	0.89	0.85	0.92	0.92	0.90	0.94	0.90	3.37
1,2,3,4,7,8-HxCDD	0.94	0.93	0.99	0.97	0.95	0.97	0.96	2.22
1,2,3,6,7,8-HxCDD	0.83	0.76	0.84	0.86	0.82	0.87	0.83	4.48
1,2,3,7,8,9-HxCDD	0.76	0.71	0.81	0.80	0.76	0.80	0.77	4.65
1,2,3,4,6,7,8-HpCDD	0.87	0.77	0.87	0.90	0.86	0.89	0.86	5.34
OCDD	0.86	0.82	0.88	0.89	0.88	0.90	0.87	3.09
2,3,7,8-TCDF	0.99	0.96	1.01	1.03	0.97	1.01	0.99	2.55
1,2,3,7,8-PeCDF	0.77	0.76	0.81	0.84	0.80	0.82	0.80	3.88
2,3,4,7,8-PeCDF	0.85	0.83	0.90	0.91	0.87	0.90	0.88	3.63
1,2,3,4,7,8-HxCDF	1.39	1.35	1.47	1.46	1.40	1.47	1.42	3.46
1,2,3,6,7,8-HxCDF	0.91	0.93	1.01	1.02	0.96	1.00	0.97	4.51
2,3,4,6,7,8-HxCDF	1.23	1.16	1.29	1.31	1.26	1.31	1.26	4.69
1,2,3,7,8,9-HxCDF	1.33	1.26	1.35	1.37	1.32	1.38	1.34	3.40
1,2,3,4,6,7,8-HpCDF	1.24	1.17	1.31	1.35	1.28	1.33	1.28	5.19
1,2,3,4,7,8,9-HpCDF	1.22	1.12	1.21	1.28	1.22	1.26	1.22	4.27
OCDF	0.88	0.83	0.91	0.94	0.90	0.92	0.90	4.37

Analyst: Date: 7/6/06

USEPA - ITD

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS4 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
LABELED COMPOUNDS								
13C-2,3,7,8-TCDD	1.01	0.98	1.01	0.97	1.01	1.01	1.00	1.65
13C-1,2,3,7,8-PeCDD	0.93	0.93	0.97	0.92	0.98	1.00	0.96	3.62
13C-1,2,3,4,7,8-HxCDD	0.91	0.88	0.90	0.91	0.91	0.91	0.90	1.50
13C-1,2,3,6,7,8-HxCDD	1.11	1.08	1.12	1.07	1.10	1.03	1.09	2.89
13C-1,2,3,4,6,7,8-HpCDD	0.96	0.92	0.97	0.92	1.00	0.97	0.96	3.26
13C-OCDD	0.73	0.67	0.72	0.66	0.75	0.74	0.71	5.16
13C-2,3,7,8-TCDF	0.94	0.93	0.96	0.90	0.96	0.94	0.94	2.38
13C-1,2,3,7,8-PeCDF	0.98	0.98	1.03	0.94	1.02	1.05	1.00	4.30
13C-2,3,4,7,8-PeCDF	0.92	0.93	0.97	0.88	0.98	0.99	0.94	4.40
13C-1,2,3,4,7,8-HxCDF	0.86	0.85	0.87	0.85	0.87	0.85	0.86	1.30
13C-1,2,3,6,7,8-HxCDF	1.26	1.22	1.26	1.22	1.23	1.18	1.23	2.51
13C-2,3,4,6,7,8-HxCDF	0.90	0.89	0.90	0.86	0.89	0.86	0.88	2.02
13C-1,2,3,7,8,9-HxCDF	0.99	0.97	1.00	0.93	1.00	0.99	0.98	3.07
13C-1,2,3,4,6,7,8-HpCDF	0.87	0.85	0.88	0.82	0.90	0.85	0.86	3.00
13C-1,2,3,4,7,8,9-HpCDF	0.70	0.68	0.71	0.64	0.73	0.72	0.70	4.45
13C-OCDF	0.83	0.78	0.84	0.74	0.88	0.86	0.82	6.47
CLEANUP STANDARD								
37Cl-2,3,7,8-TCDD	0.88	0.83	0.81	0.74	0.72	0.76	0.79	7.43

Analyst: Date: 7/6/06

USEPA - ITD

FORM 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS3 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS						QC LIMITS
		CS1	CS2	CS3	CS4	CS5	CS6	
NATIVE ANALYTES								
2,3,7,8-TCDD	M/M+2	0.85	0.85	0.81	0.77	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.65	1.53	1.57	1.54	1.58	1.57	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.32	1.27	1.27	1.26	1.26	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.20	1.28	1.21	1.25	1.26	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.33	1.25	1.24	1.22	1.24	1.25	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.11	1.14	1.01	1.05	1.05	1.03	0.88-1.20
OCDD	M+2/M+4	0.89	0.85	0.90	0.89	0.87	0.91	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.66	0.75	0.74	0.79	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.41	1.54	1.55	1.58	1.56	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.46	1.51	1.53	1.56	1.57	1.56	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.24	1.23	1.25	1.25	1.24	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.31	1.24	1.24	1.25	1.24	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.15	1.31	1.25	1.25	1.24	1.25	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.34	1.21	1.23	1.24	1.26	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	1.04	1.06	1.04	1.04	1.04	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	1.08	1.00	1.04	1.05	1.04	0.88-1.20
OCDF	M+2/M+4	0.87	0.91	0.91	0.93	0.93	0.92	0.76-1.02

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 3D

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS3 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS
13C-2,3,7,8-TCDD	M/M+2	0.78	0.81	0.78	0.79	0.78	0.79	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.58	1.58	1.59	1.59	1.58	1.32-1.78
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.26	1.27	1.26	1.27	1.27	1.05-1.43
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.25	1.25	1.28	1.25	1.27	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	1.06	1.06	1.07	1.05	1.06	0.88-1.20
13C-OCDD	M+2/M+4	0.92	0.90	0.89	0.91	0.90	0.91	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.79	0.81	0.79	0.79	0.80	0.80	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.60	1.59	1.58	1.60	1.60	1.32-1.78
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.60	1.60	1.62	1.59	1.61	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.53	0.53	0.53	0.53	0.53	0.43-0.59
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.53	0.53	0.54	0.52	0.53	0.43-0.59
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.53	0.53	0.53	0.53	0.53	0.43-0.59
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.52	0.53	0.52	0.52	0.53	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.44	0.45	0.44	0.46	0.46	0.37-0.51
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.45	0.44	0.45	0.44	0.45	0.37-0.51
13C-OCDF	M+2/M+4	0.90	0.91	0.90	0.91	0.90	0.90	0.76-1.02

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 11:49:47

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	y	50.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.6	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	52.1	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	102	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	10.3	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	52.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	51.9	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.3	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	52.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.9	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	51.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.6	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.4	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	105	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	96.1	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	100	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	99.0	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	95.7	72.0 - 138
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	186	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.9	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	93.9	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	93.4	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	98.9	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	99.1	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	97.4	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	94.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	95.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	92.2	77.0 - 129
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	180	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.37	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/6/06

EPA Method 8290
Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	y	50.8	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.6	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.6	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.7	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	52.1	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	102	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	10.3	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	52.6	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	51.9	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.3	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	52.4	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.9	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	51.4	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.6	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.4	40.0 - 60.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	105	80.0 - 120

(1) See Method 8290 for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Method 8290.

(3) Contract-required concentration range as specified in Method 8290

Analyst: _____ Date: 7/6/06

EPA Method 8290
Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	96.1	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	100	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	99.0	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	95.7	70.0 - 130
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	186	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.9	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	93.9	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	93.4	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	98.9	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	99.1	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	97.4	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	94.2	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	95.4	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	92.2	70.0 - 130
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	180	140 - 260
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.37	7.00 - 13.0

(1) See Method 8290 for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Method 8290.

(3) Contract-required concentration range as specified in Method 8290

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4A
TCDD CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.20 - 12.3
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	10.3	8.60 - 11.6
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	85.0 - 117
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.9	76.0 - 131
CLEANUP STANDARDS						
37Cl-2,3,7,8-TCDD					9.37	8.30 - 12.1

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6A, Method 1613

Analyst: [signature] Date: 7/6/06

USEPA - ITD

FORM 4A
TCDD CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.20 - 12.3
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	85.0 - 117
CLEANUP STANDARDS						
37Cl-2,3,7,8-TCDD					9.37	8.30 - 12.1

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6A, Method 1613

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4A
EPA METHOD 8290 TCDD CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL1 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.00 - 12.0
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	70.0 - 130
CLEANUP STANDARDS						
37Cl-2,3,7,8-TCDD					9.37	7.00 - 13.0

Analyst: [signature] Date: 7/6/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-5 IS Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:37	1,3,6,8-TCDF (F)	23:16
1,2,8,9-TCDD (L)	28:34	1,2,8,9-TCDF (L)	28:48
1,2,4,7,9-PeCDD (F)	30:27	1,3,4,6,8-PeCDF (F)	28:37
1,2,3,8,9-PeCDD (L)	33:60	1,2,3,8,9-PeCDF (L)	34:26
1,2,4,6,7,9-HxCDD (F)	36:18	1,2,3,4,6,8-HxCDF (F)	35:25
1,2,3,7,8,9-HxCDD (L)	39:22	1,2,3,7,8,9-HxCDF (L)	39:57
1,2,3,4,6,7,9-HpCDD (F)	42:57	1,2,3,4,6,7,8-HpCDF (F)	42:26
1,2,3,4,6,7,8-HpCDD (L)	44:19	1,2,3,4,7,8,9-HpCDF (L)	45:15

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/6/06

EPA 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-5 IS Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:37	1,3,6,8-TCDF (F)	23:16
1,2,8,9-TCDD (L)	28:34	1,2,8,9-TCDF (L)	28:48

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/6/06

Form 5

TCDD RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-5 IS Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:37
1,2,8,9-TCDD (L)	28:34

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.236	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.172	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.221	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/4/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.126	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.078	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.267	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FORM 6A
TCDD RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
37Cl-2,3,7,8-TCDD		1.023	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FORM 6A
TCDD RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
37Cl-2,3,7,8-TCDD		1.023	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FAL ID: ST070506M3 Filename: 05JUL06M Sam:1 Acquired: 5-JUL-06 11:49:47 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 051212J ConCal: NA EndCal: NA
Results: GC Column: db5 Amount: 1.000 NATO 1989 Tox: 103
WHO 1998 Tox: 129

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.46e+07	0.77 y	27:37	1.10	10.5		2.50	-	*	
1,2,3,7,8-PeCDD	5.50e+07	1.54 y	33:25	0.90	50.8		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.12e+07	1.27 y	38:45	0.96	50.6		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.30e+07	1.21 y	38:55	0.83	51.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.71e+07	1.22 y	39:22	0.77	51.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	3.85e+07	1.05 y	44:19	0.86	52.1		2.50	-	*	
OCDD	5.49e+07	0.89 y	49:51	0.87	102		2.50	-	*	
2,3,7,8-TCDF	1.80e+07	0.79 y	26:53	0.99	10.3		2.50	-	*	
1,2,3,7,8-PeCDF	7.71e+07	1.55 y	31:42	0.80	52.6		2.50	-	*	
2,3,4,7,8-PeCDF	7.81e+07	1.56 y	33:01	0.88	51.9		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.80e+07	1.25 y	37:22	1.42	51.3		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.78e+07	1.24 y	37:34	0.97	52.4		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.27e+07	1.25 y	38:31	1.26	51.9		2.50	-	*	
1,2,3,7,8,9-HxCDF	5.95e+07	1.23 y	39:57	1.34	51.4		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.20e+07	1.04 y	42:26	1.28	52.6		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	3.85e+07	1.04 y	45:15	1.22	52.4		2.50	-	*	
OCDF	6.49e+07	0.93 y	50:15	0.90	105		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.27e+08	0.79 y	27:36	1.00	97.6					97.6
13C-1,2,3,7,8-PeCDD	1.20e+08	1.59 y	33:23	0.96	96.1					96.1
13C-1,2,3,4,7,8-HxCDD	8.50e+07	1.26 y	38:44	0.90	100					100
13C-1,2,3,6,7,8-HxCDD	1.01e+08	1.28 y	38:53	1.09	99.0					99.0
13C-1,2,3,4,6,7,8-HpCDD	8.58e+07	1.07 y	44:18	0.96	95.7					95.7
13C-OCDD	1.24e+08	0.91 y	49:51	0.71	186					92.9
13C-2,3,7,8-TCDF	1.75e+08	0.79 y	26:52	0.94	95.9					95.9
13C-1,2,3,7,8-PeCDF	1.83e+08	1.58 y	31:40	1.00	93.9					93.9
13C-2,3,4,7,8-PeCDF	1.72e+08	1.62 y	32:59	0.94	93.4					93.4
13C-1,2,3,4,7,8-HxCDF	7.96e+07	0.53 y	37:21	0.86	98.9					98.9
13C-1,2,3,6,7,8-HxCDF	1.14e+08	0.54 y	37:33	1.23	99.1					99.1
13C-2,3,4,6,7,8-HxCDF	8.06e+07	0.53 y	38:29	0.88	97.4					97.4
13C-1,2,3,7,8,9-HxCDF	8.66e+07	0.52 y	39:56	0.98	94.2					94.2
13C-1,2,3,4,6,7,8-HpCDF	7.71e+07	0.44 y	42:25	0.86	95.4					95.4
13C-1,2,3,4,7,8,9-HpCDF	6.03e+07	0.45 y	45:14	0.70	92.2					92.2
13C-OCDF	1.38e+08	0.91 y	50:14	0.82	180					89.8
37Cl-2,3,7,8-TCDD	9.65e+06		27:38	0.81	9.13					91.3
13C-1,2,3,4-TCDD	1.31e+08	0.81 y	27:01	-	68.2					
13C-1,2,3,4-TCDF	1.95e+08	0.79 y	25:47	-	67.9					
13C-1,2,3,7,8,9-HxCDD	9.36e+07	1.26 y	39:21	-	62.7					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	6.21e+07		23:04	1.10	44.4		2.50	-	*	29
Total Penta-Dioxins	1.53e+08		30:27	0.90	141		2.50	-	*	18
Total Hexa-Dioxins	1.72e+08		36:18	0.85	218		2.50	-	*	7
Total Hepta-Dioxins	7.53e+07		42:57	0.86	102		2.50	-	*	32
Total Tetra-Furans	7.08e+07		22:57	0.99	40.6		2.50	-	*	16
1st Fn. Tot Penta-Furans	6.87e+07		28:37	0.84	46.2		2.50	-	*	2 PeCDF
Total Penta-Furans	2.11e+08		30:23	0.84	142		2.50	-	*	14 188
Total Hexa-Furans	2.98e+08		35:25	1.22	270		2.50	-	*	24
Total Hepta-Furans	9.19e+07		42:26	1.25	107		2.50	-	*	15

Analyst: _____ Date: 7/10/06

FAL ID: ST070506M3 Filename: 05JUL06M Sam:1 Acquired: 5-JUL-06 11:49:47 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 051212J ConCal: NA EndCal: NA
Results: GC Column: db5 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	WHO 1998 Noise	Tox: NA DL	Rec
2,3,7,8-TCDD	1.46e+07	0.77 y	27:37	1.10	10.5		2.50	-	*	
2,3,7,8-TCDF	1.80e+07	0.79 y	26:53	0.994	10.3		2.50	-	*	
13C-2,3,7,8-TCDD	1.27e+08	0.79 y	27:36	0.998	97.6					97.6
13C-2,3,7,8-TCDF	1.75e+08	0.79 y	26:52	0.937	95.9					95.9
37Cl-2,3,7,8-TCDD	9.65e+06		27:38	0.809	9.13					91.3
13C-1,2,3,4-TCDD	1.31e+08	0.81 y	27:01	-	68.2					
13C-1,2,3,4-TCDF	1.95e+08	0.79 y	25:47	-	67.9					

Analyst: Date: 7/6/06

FAL ID: ST070506M3 Filename: 05JUL06M Sam:1 Acquired: 5-JUL-06 11:49:47 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 051212J ConCal: NA EndCal: NA
Results: GC Column: db5 Amount: 1.000 NATO 1989 Tox: NA
WHO 1998 Tox: NA

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	Rec
2,3,7,8-TCDD	1.46e+07	0.77 y	27:37	1.10	10.5		2.50	-	*	
13C-2,3,7,8-TCDD	1.27e+08	0.79 y	27:36	0.998	97.6					97.6
37Cl-2,3,7,8-TCDD	9.65e+06	0.81 y	27:38	0.809	9.13					91.3
13C-1,2,3,4-TCDD	1.31e+08		27:01	-	68.2					

Analyst: Date: 7/6/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:05JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

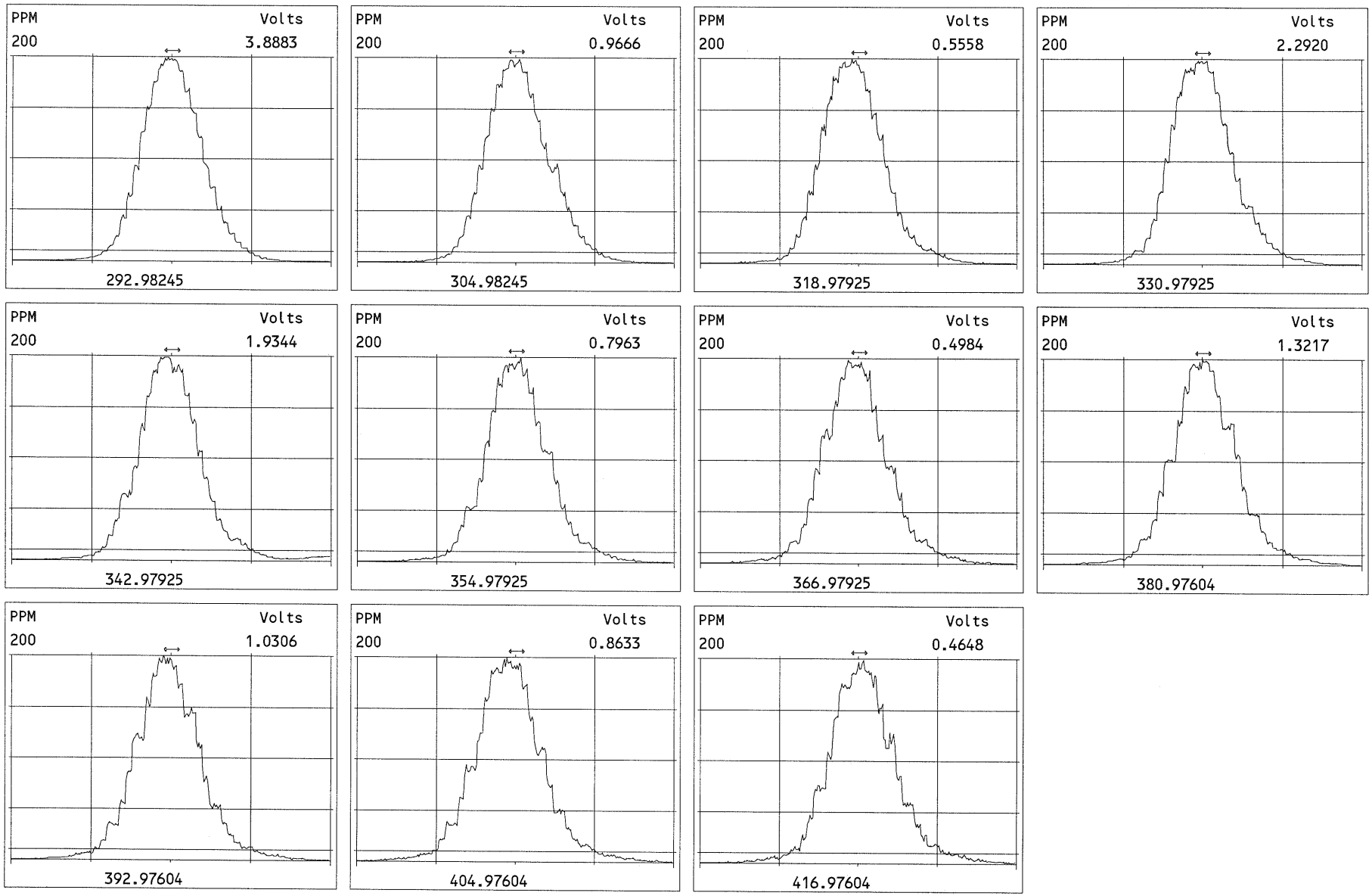
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
05JUL06M	1	ST070506M3	1613 CS3 051212J	5-JUL-06 11:49:47	NA	NA	TC
05JUL06M	2	ST070506M0	1613 CS0 051212G	5-JUL-06 12:45:16	NA	NA	TC
05JUL06M	3	ST070506M1	1613 CS1 051212H	5-JUL-06 13:40:39	NA	NA	TC
05JUL06M	4	ST070506M2	1613 CS2 051212I	5-JUL-06 14:36:03	NA	NA	TC
05JUL06M	5	ST070506M4	1613 CS4 051212K	5-JUL-06 15:31:26	NA	NA	TC
05JUL06M	6	ST070506M5	1613 CS5 051212L	5-JUL-06 16:26:53	NA	NA	TC
05JUL06M	7	SB070506M1	Solvent Blank	5-JUL-06 17:22:17	NA	NA	TC
05JUL06M	8	ST070506M6	1613 CS3 051212J	5-JUL-06 18:17:45	ST070506M6	ST070506M7	TC
05JUL06M	9	0899-001-0001-OPR	OPR	5-JUL-06 19:13:09	ST070506M6	ST070506M7	TC
05JUL06M	10	0898-001-0001-OPR	OPR	5-JUL-06 20:08:33	ST070506M6	ST070506M7	TC
05JUL06M	11	0898-001-0001-MB	Method Blank	5-JUL-06 21:03:48	ST070506M6	ST070506M7	TC
05JUL06M	12	0899-001-0001-MB	Method Blank	5-JUL-06 21:59:03	ST070506M6	ST070506M7	TC
05JUL06M	13	3941-001-0001-SA	2606270001	5-JUL-06 22:54:19	ST070506M6	ST070506M7	TC
05JUL06M	14	3942-001-0001-SA	Well #5	5-JUL-06 23:49:35	ST070506M6	ST070506M7	TC
05JUL06M	15	3929-001-0001-SA	E3-B4-EP162-159	6-JUL-06 00:44:54	ST070506M6	ST070506M7	TC
05JUL06M	16	3934-001-0001-SA	E3-B4-EP162-160	6-JUL-06 01:40:15	ST070506M6	ST070506M7	TC
05JUL06M	17	3934-002-0001-SA	E3-B4-EP162-161	6-JUL-06 02:35:32	ST070506M6	ST070506M7	TC
05JUL06M	18	3934-003-0001-SA	E3-B4-EP162-162	6-JUL-06 03:30:47	ST070506M6	ST070506M7	TC
05JUL06M	19	3934-004-0001-SA	E3-B4-EP162-163	6-JUL-06 04:26:06	ST070506M6	ST070506M7	TC
05JUL06M	20	SB070506M2	Solvent Blank	6-JUL-06 05:21:22	ST070506M6	ST070506M7	TC
05JUL06M	21	ST070506M7	1613 CS3 051212J	6-JUL-06 06:16:37	ST070506M6	ST070506M7	TC

8 7/6/06

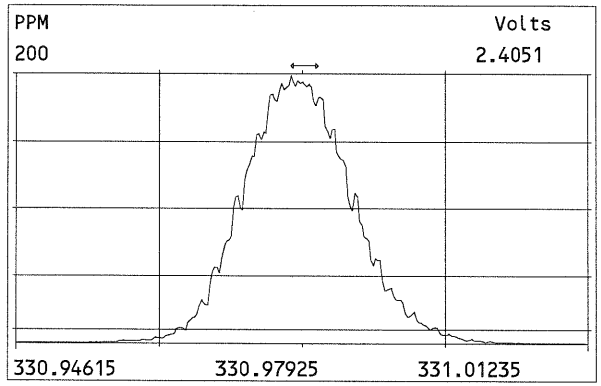
Data Backed Up:_____

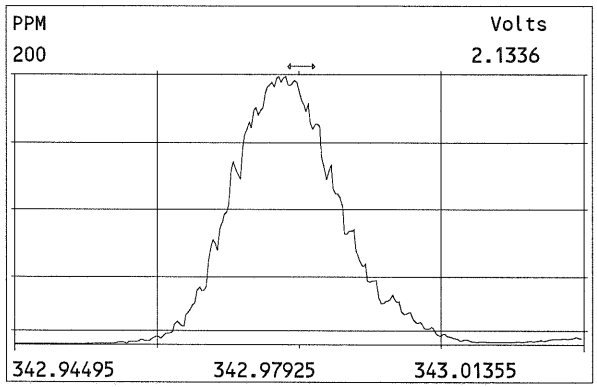
Date:_____

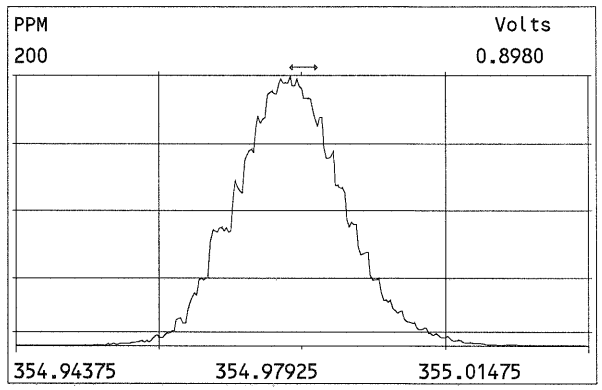
Peak Locate Examination: 5-JUL-2006:11:48 File:05JUL06M
Experiment:PCDD Function:1 Reference:PFK

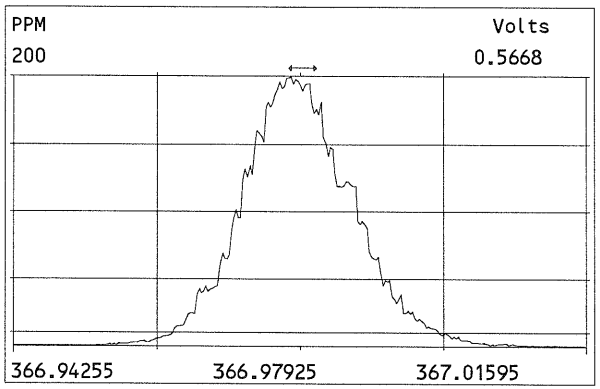


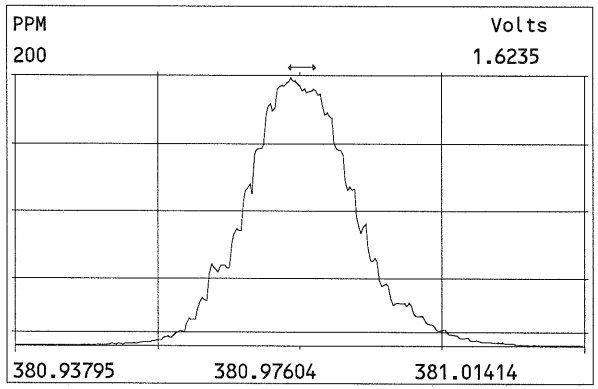
Peak Locate Examination: 5-JUL-2006:11:48 File:05JUL06M
Experiment:PCDD Function:2 Reference:PFK

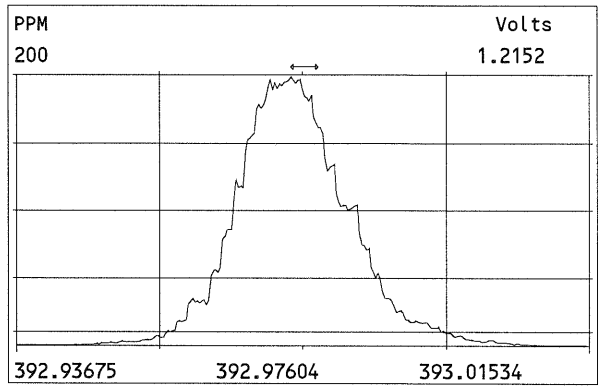


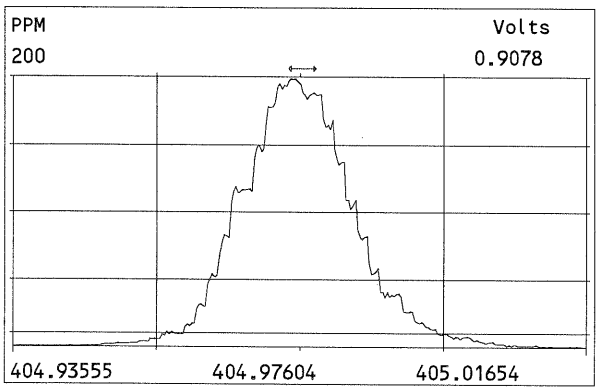


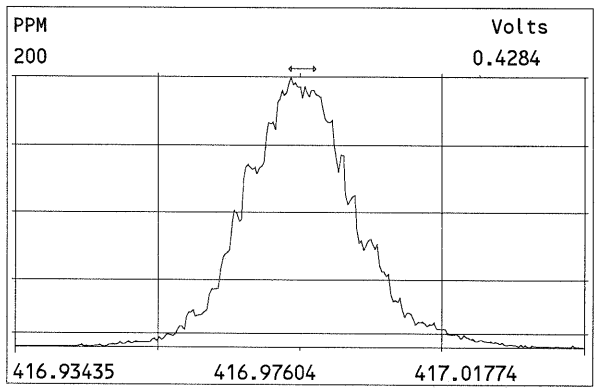




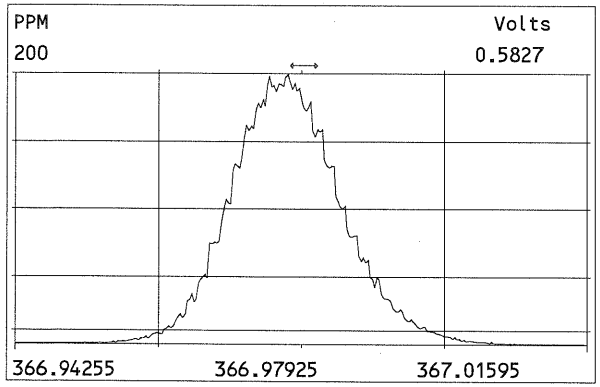


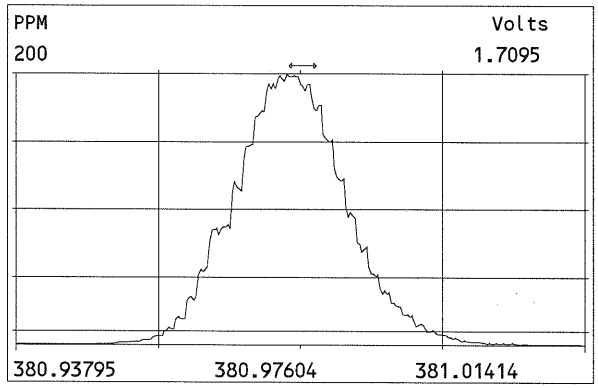


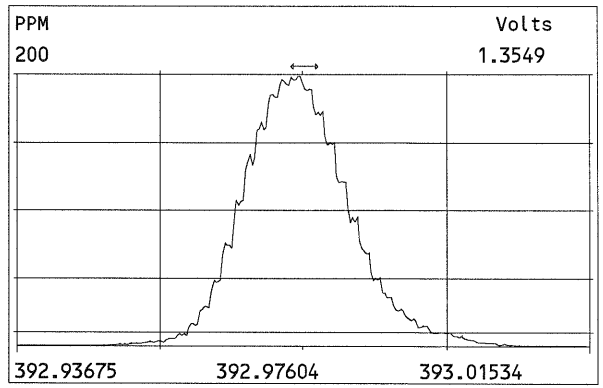


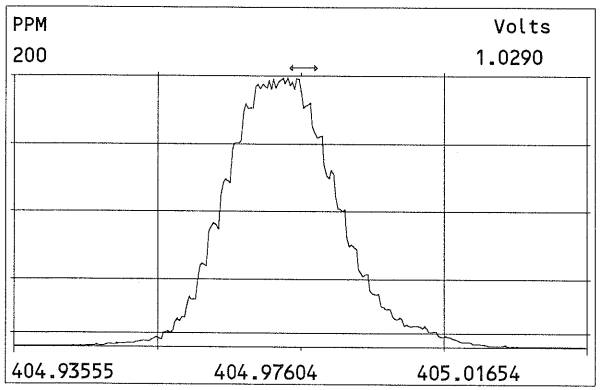


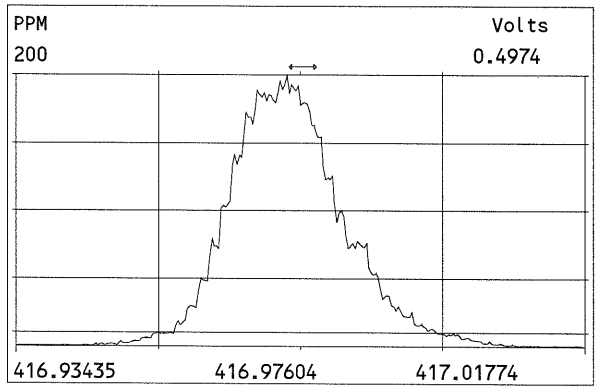
Peak Locate Examination: 5-JUL-2006:11:48 File:05JUL06M
Experiment:PCDD Function:3 Reference:PFK

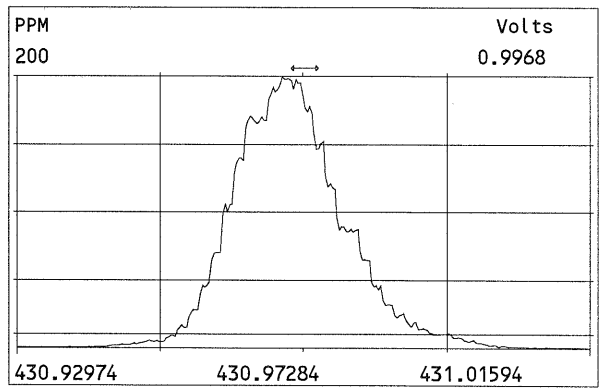


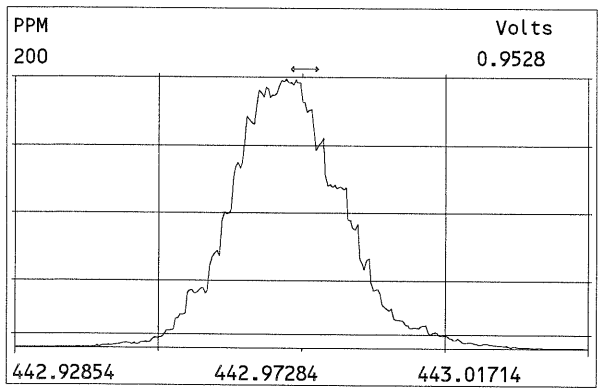


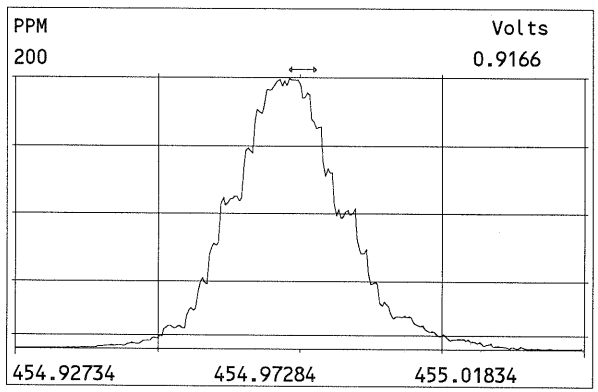




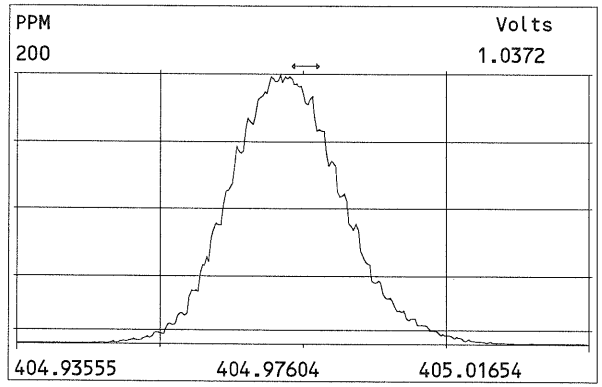


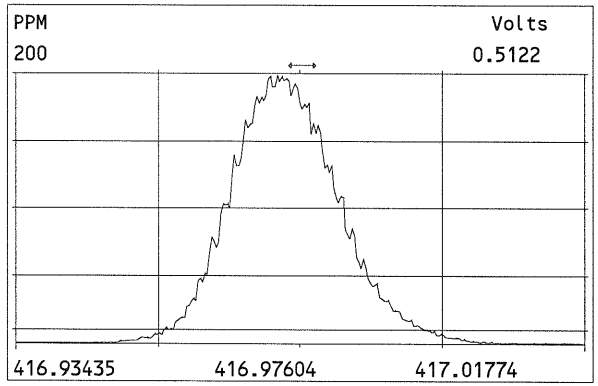


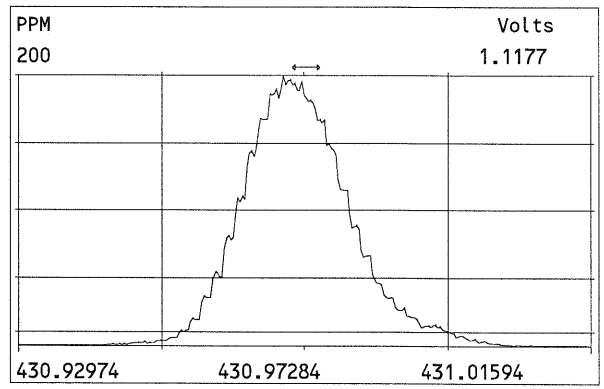


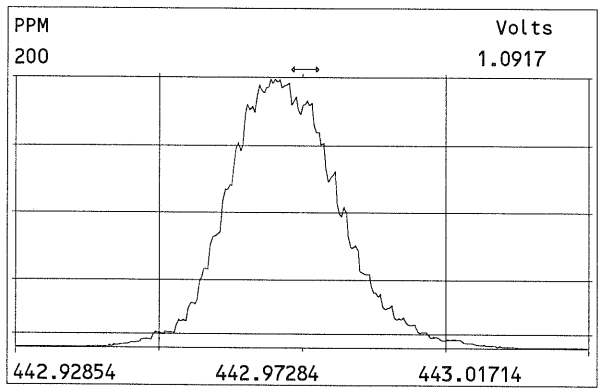


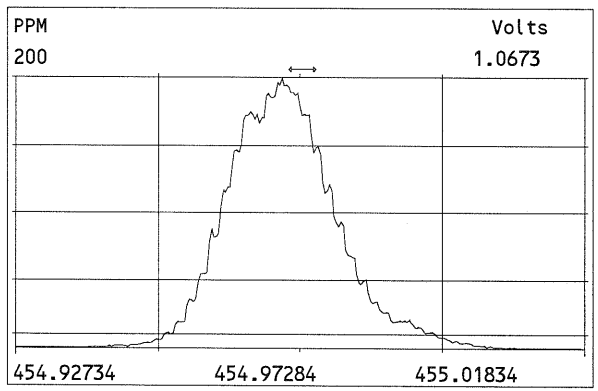
Peak Locate Examination: 5-JUL-2006:11:49 File:05JUL06M
Experiment:PCDD Function:4 Reference:PFK

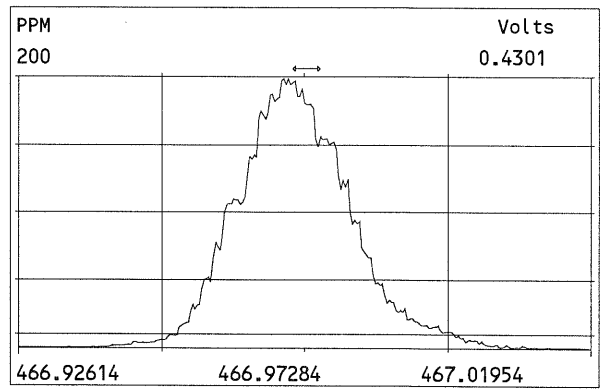


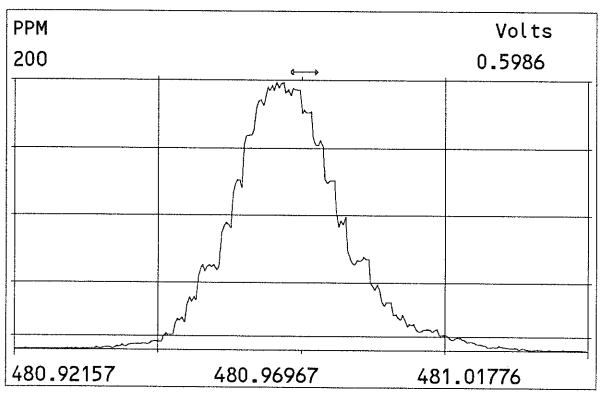




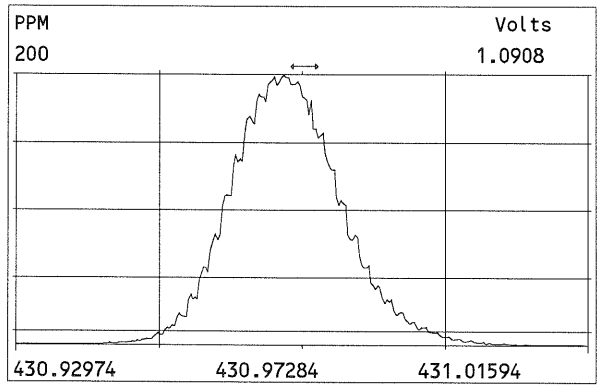


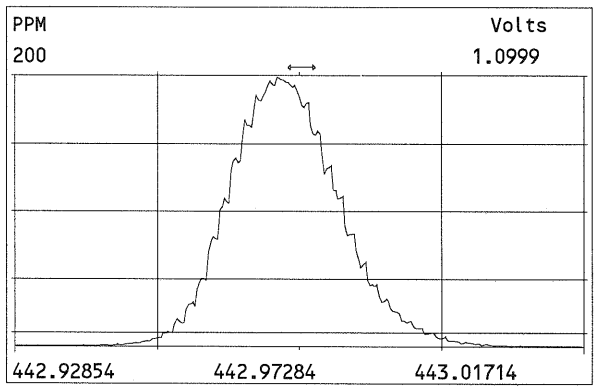


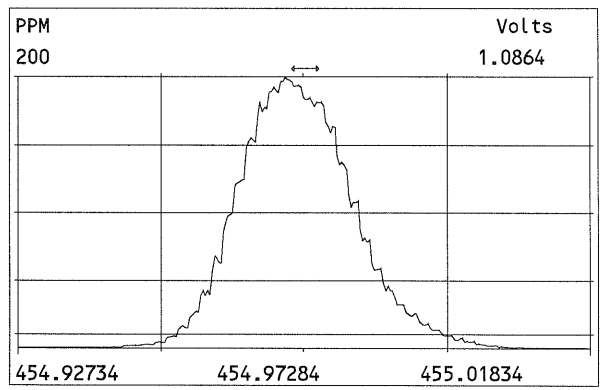


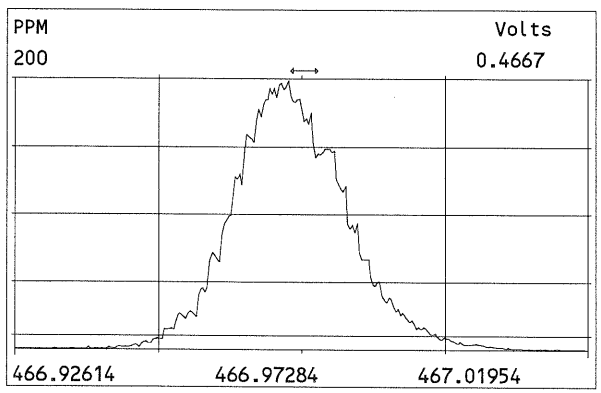


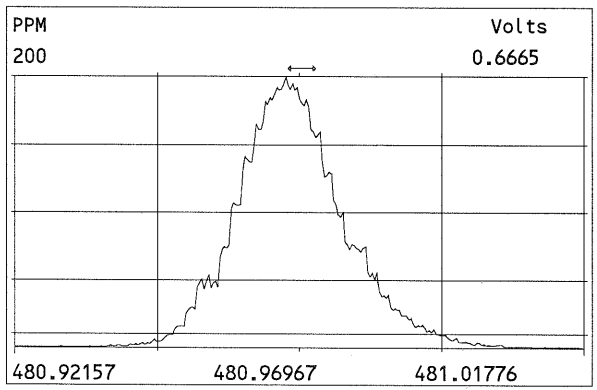
Peak Locate Examination: 5-JUL-2006:11:49 File:05JUL06M
Experiment:PCDD Function:5 Reference:PFK

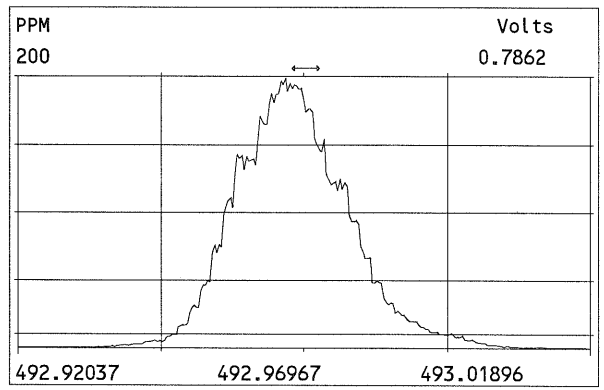


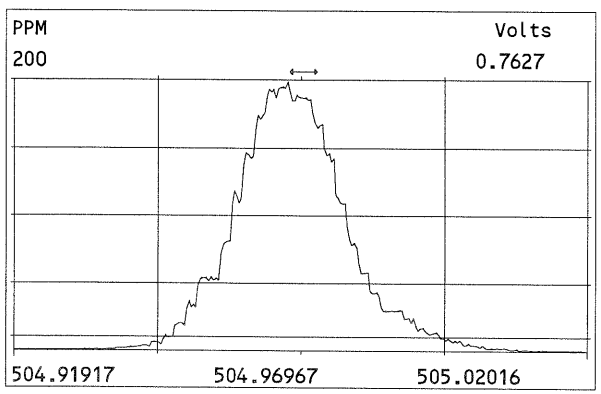


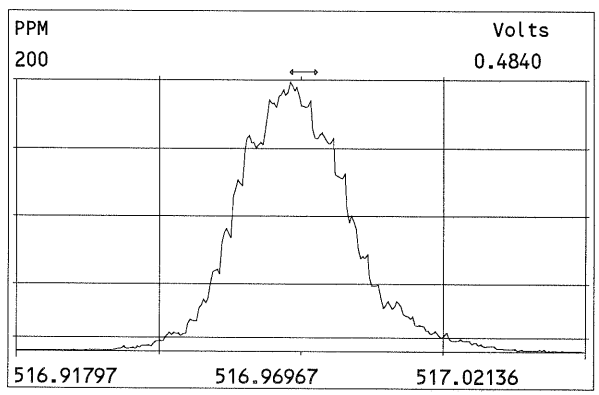




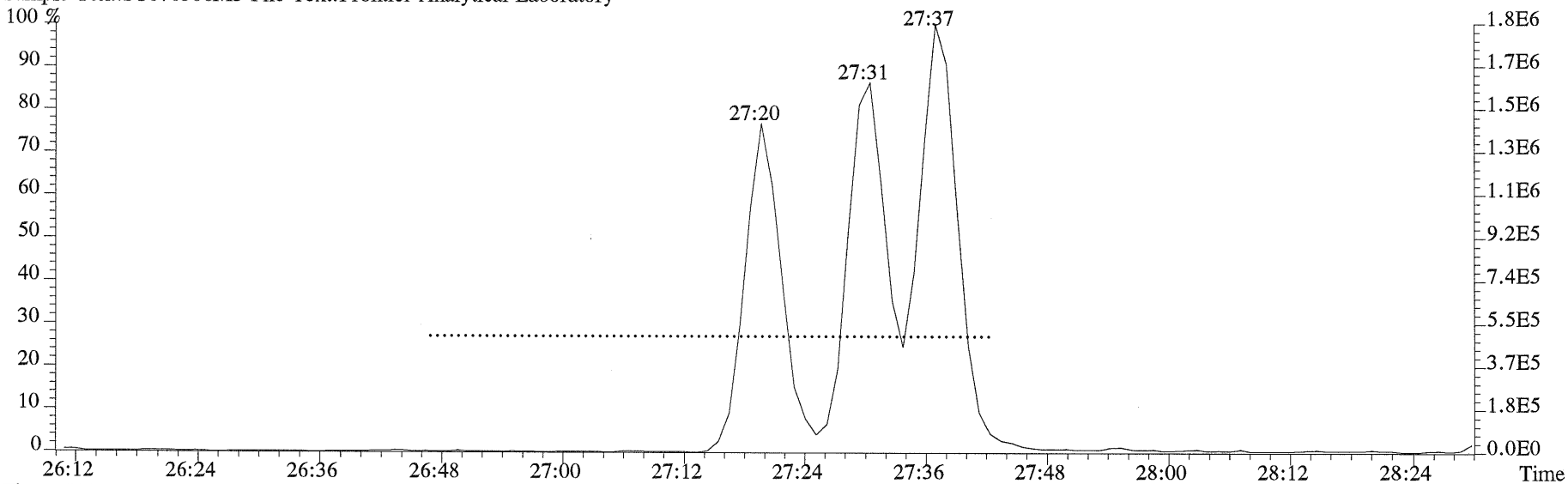




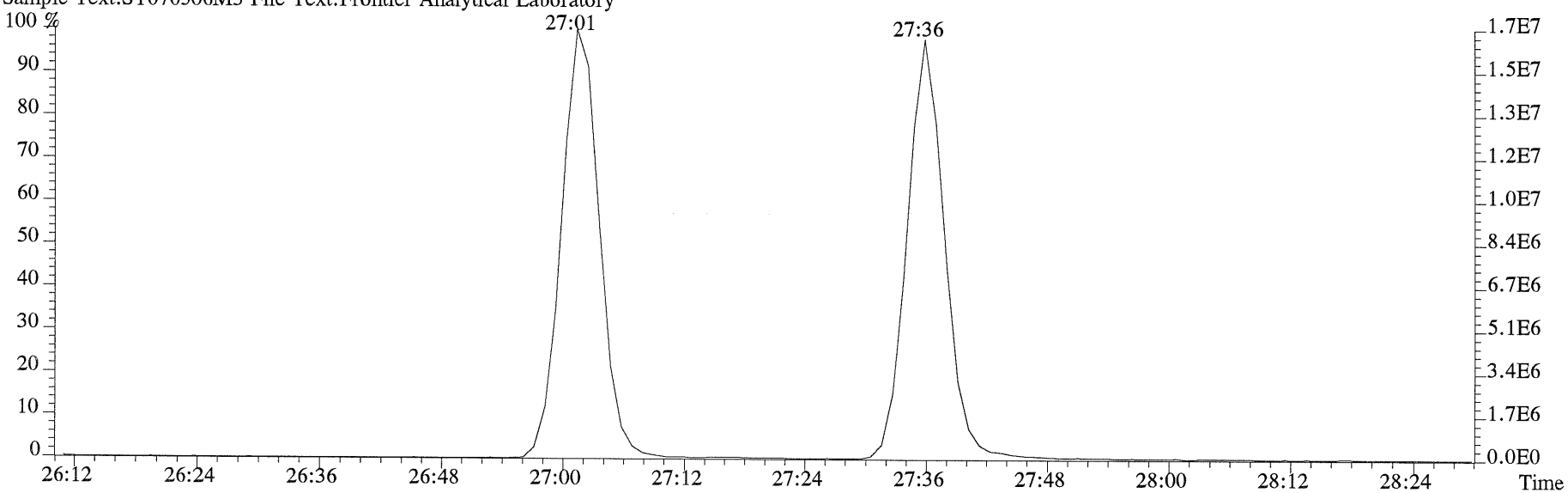




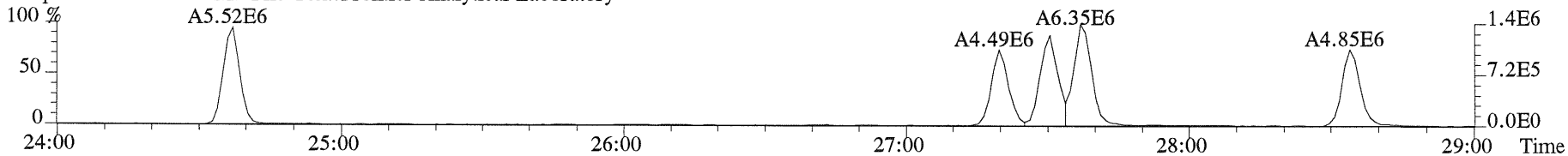
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



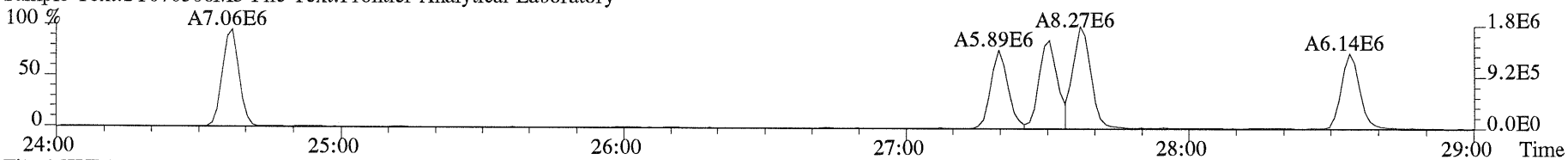
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



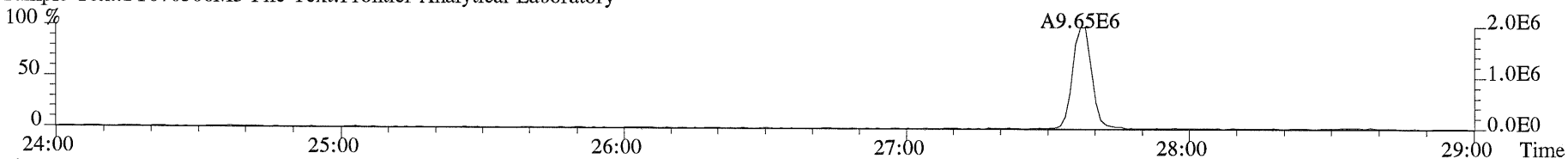
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



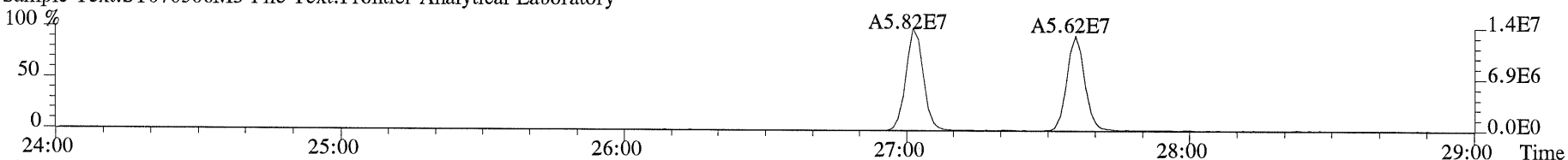
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



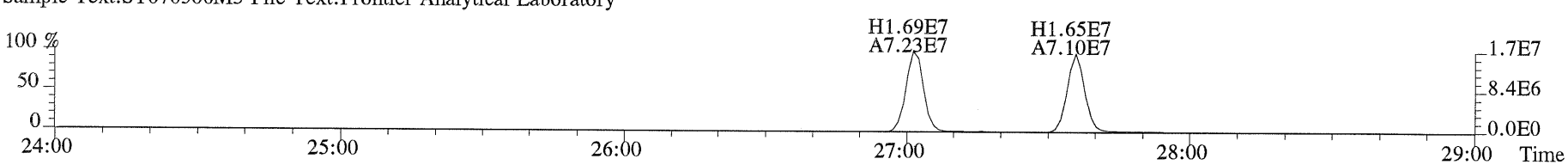
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



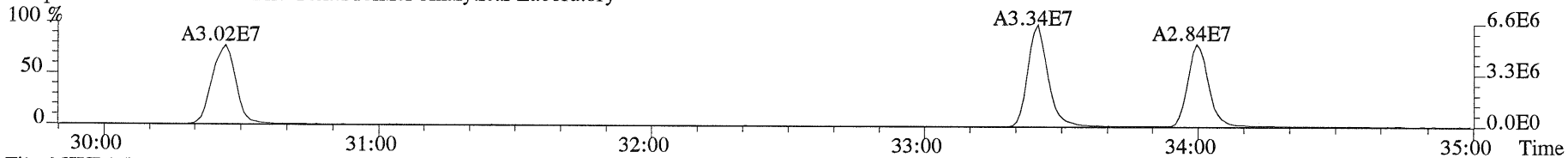
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



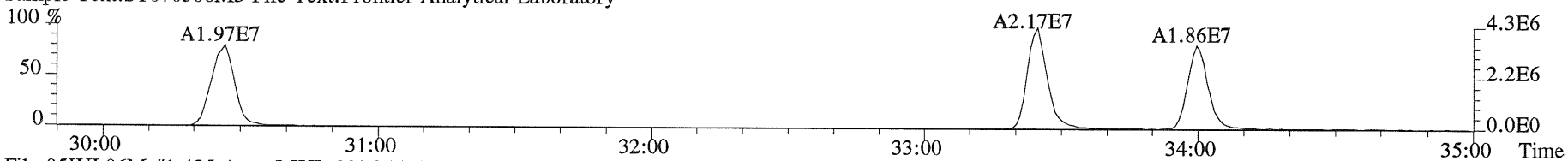
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



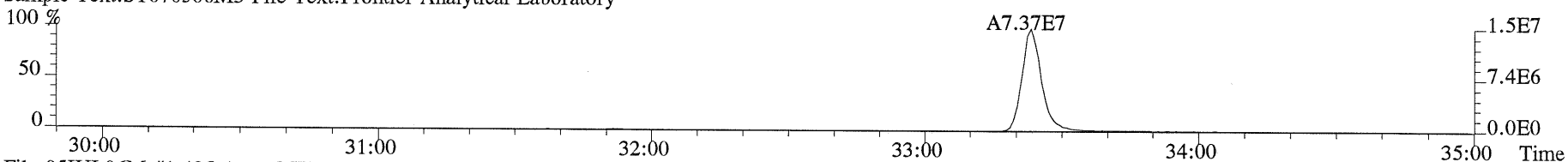
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



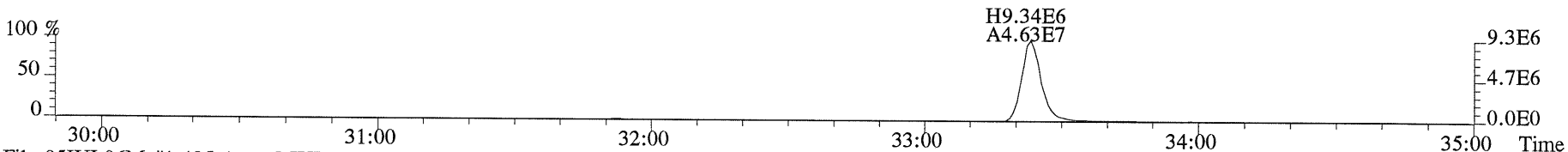
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



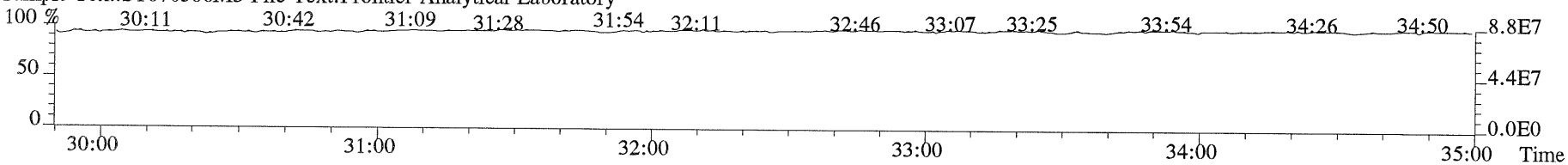
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



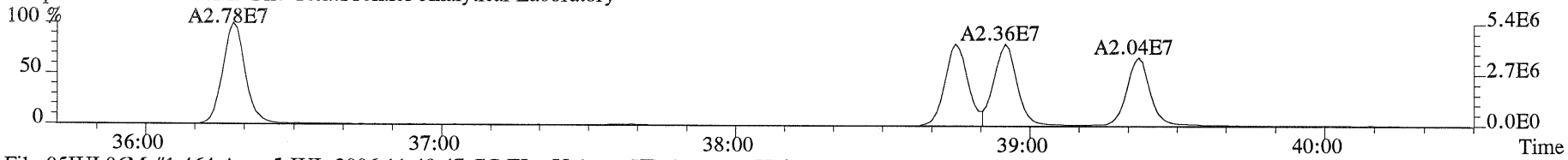
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



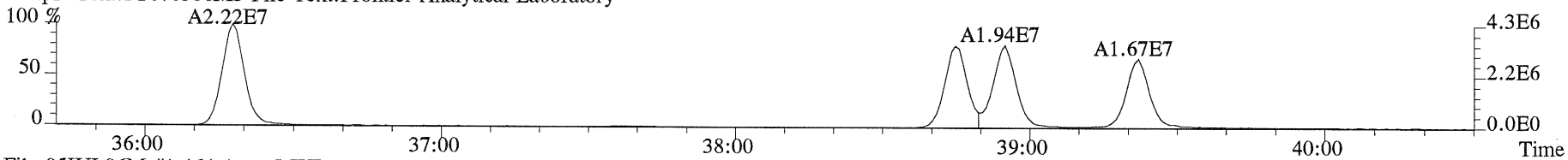
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



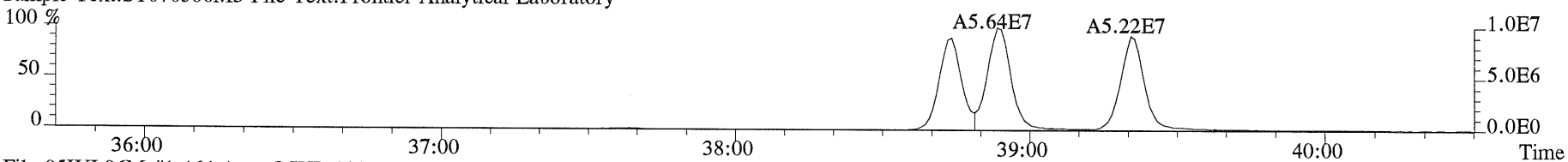
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



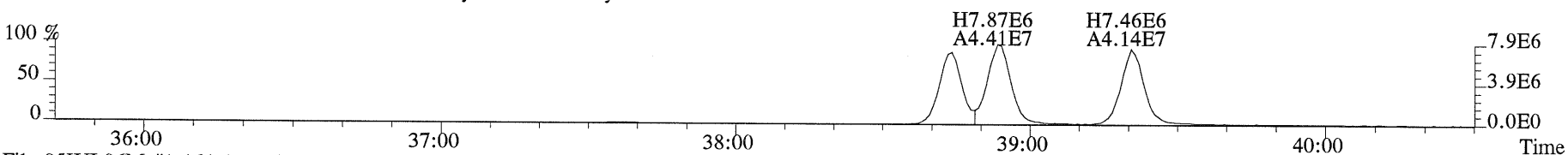
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



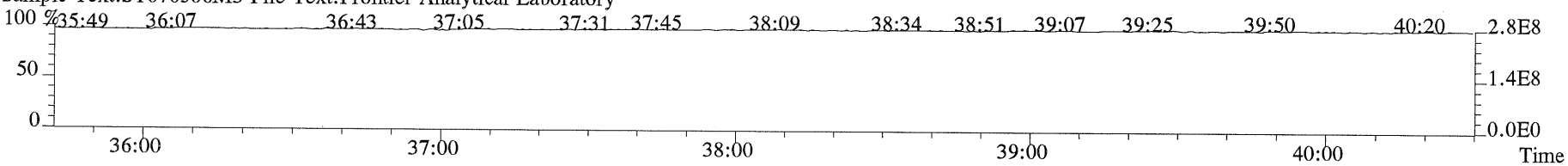
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



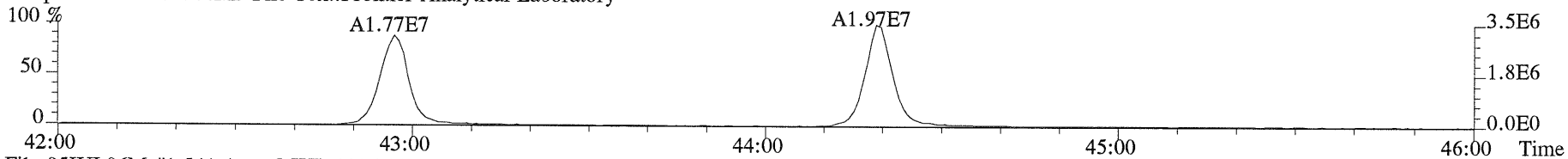
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



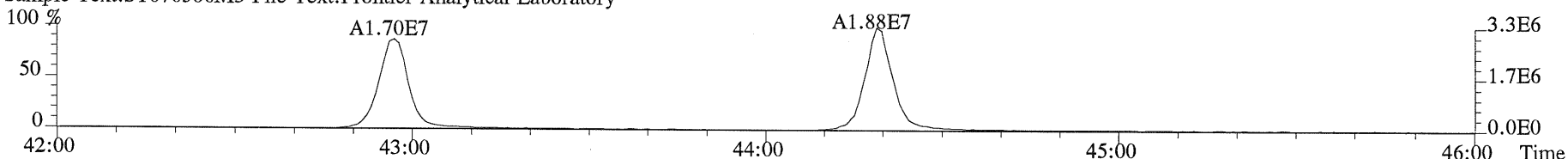
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



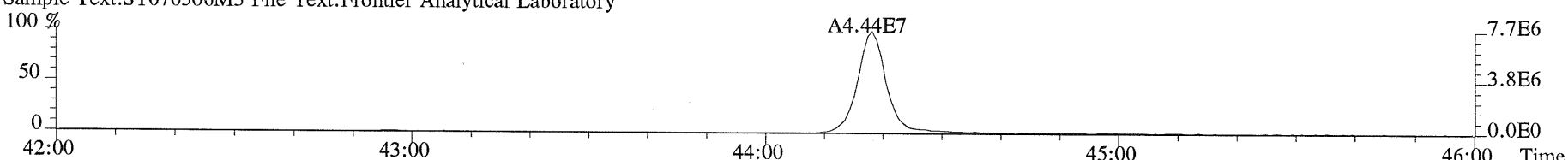
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



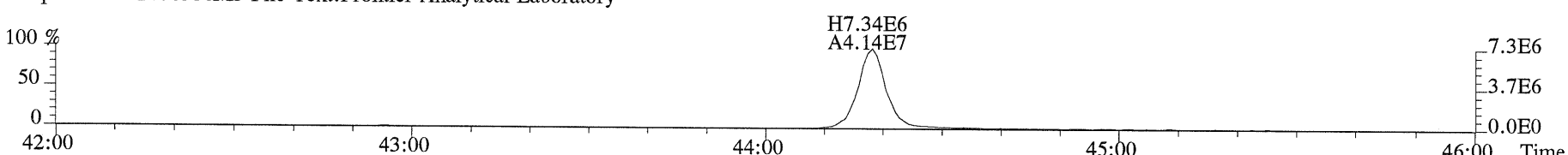
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



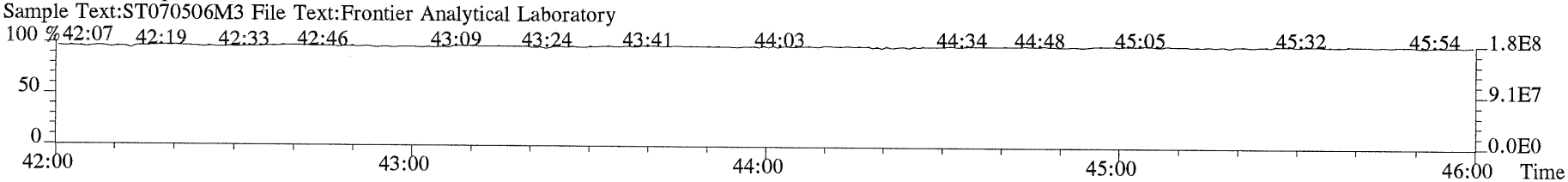
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



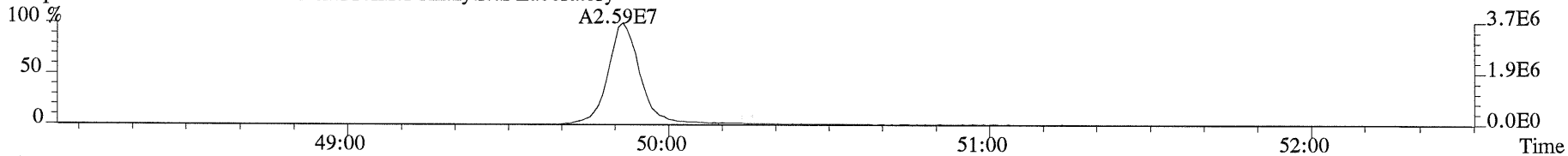
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



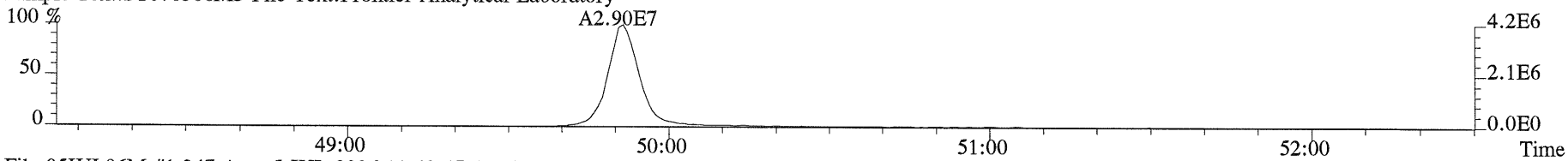
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



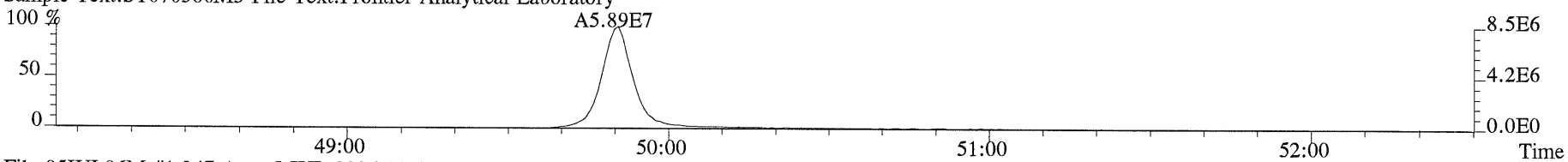
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



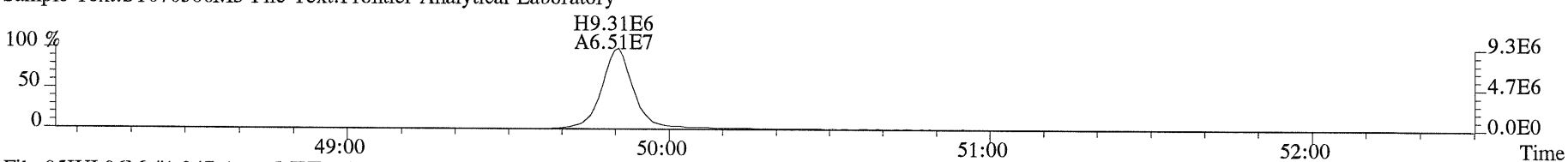
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



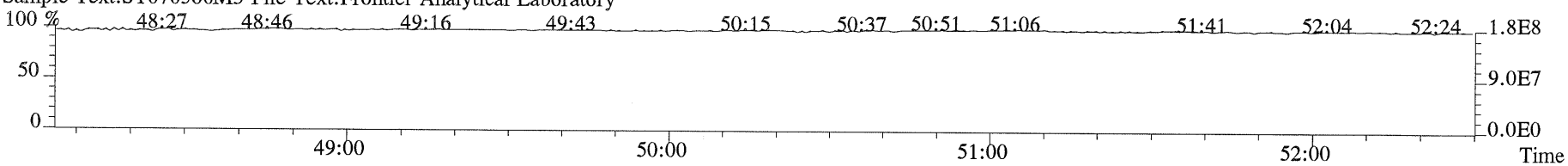
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



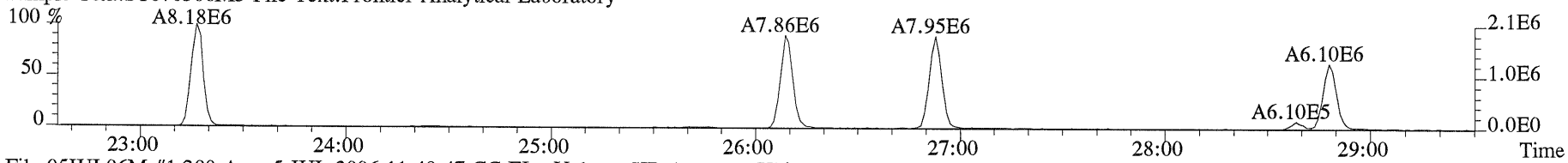
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



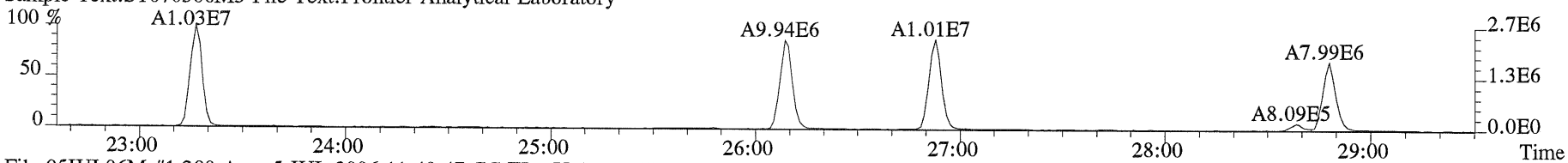
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



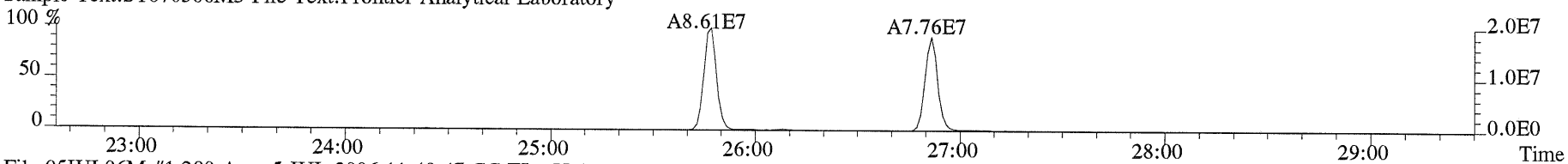
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



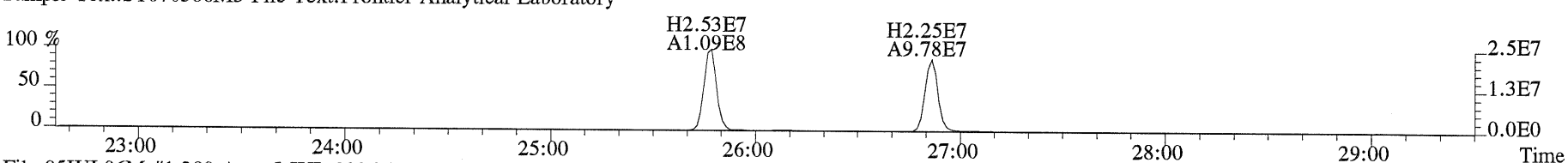
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



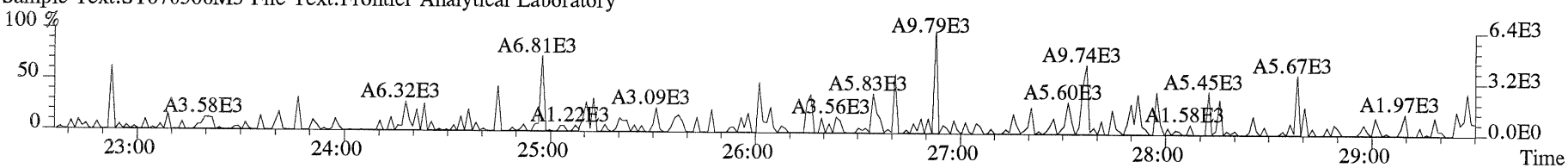
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



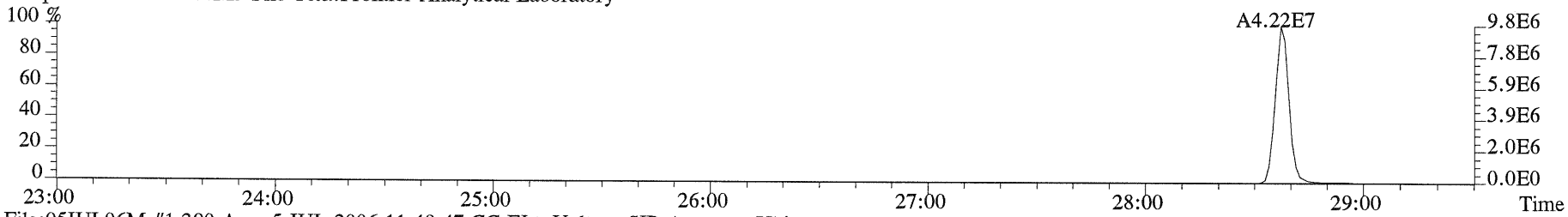
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



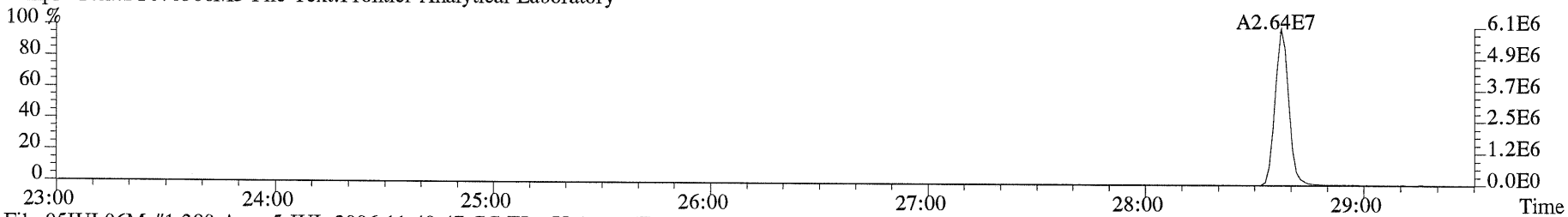
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



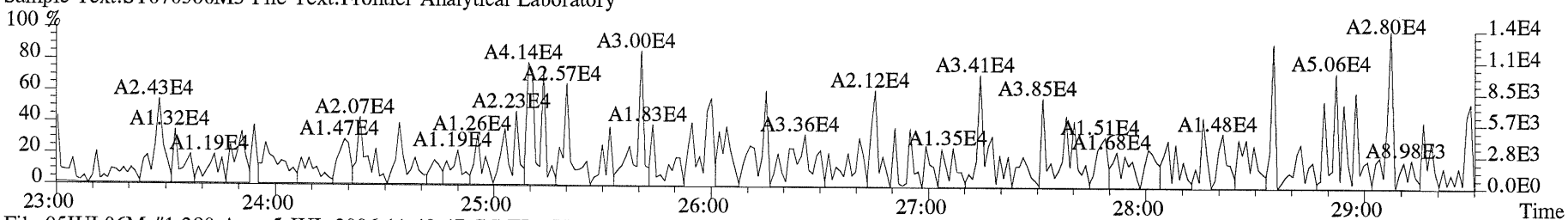
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



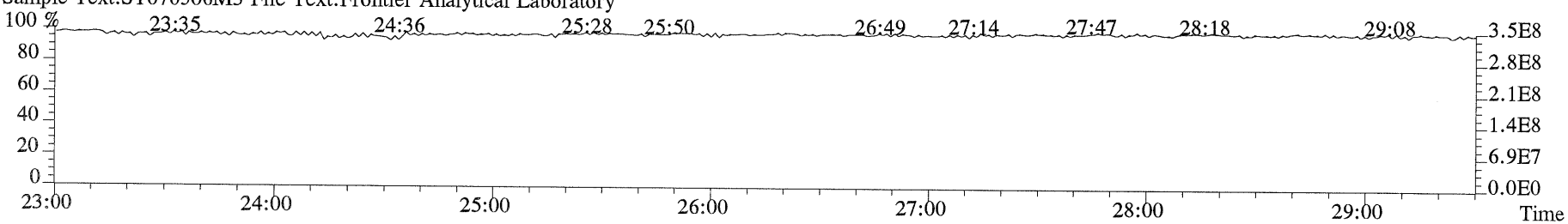
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



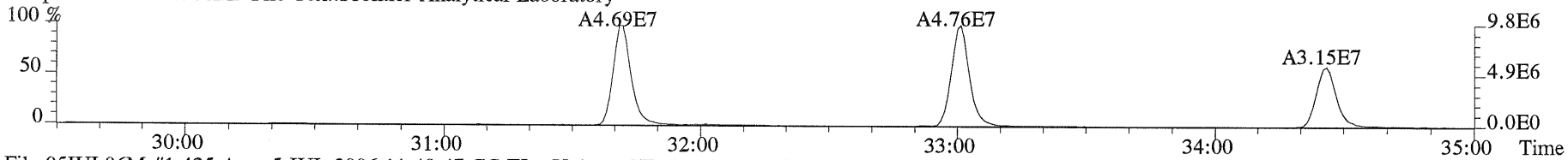
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



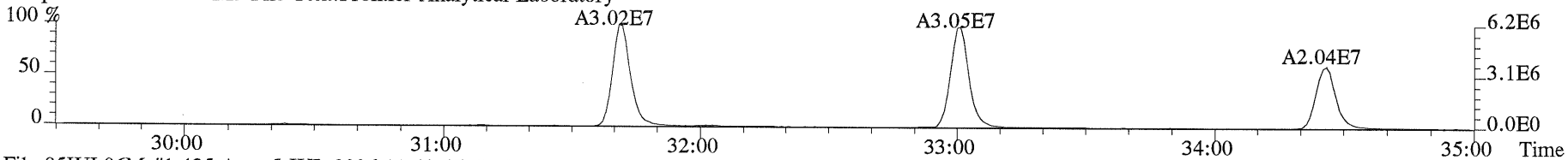
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



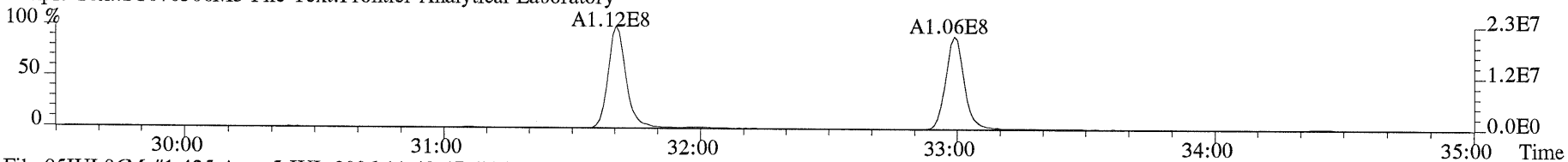
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



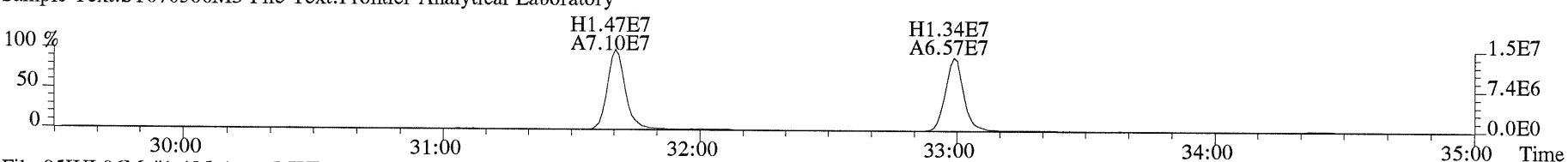
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



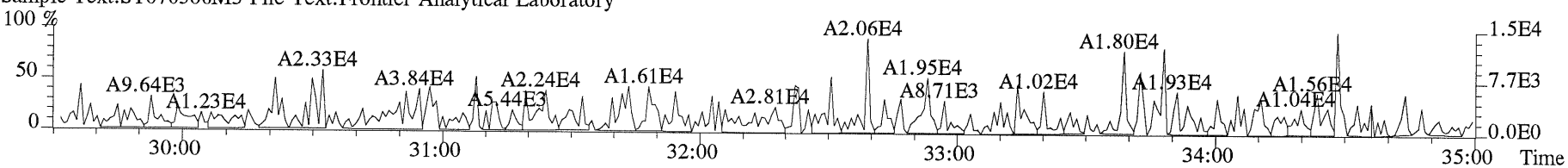
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



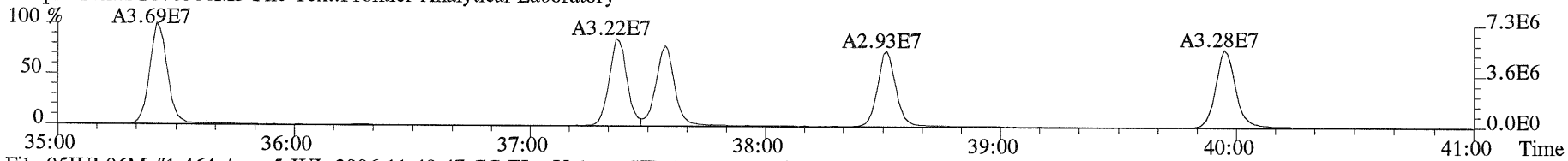
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



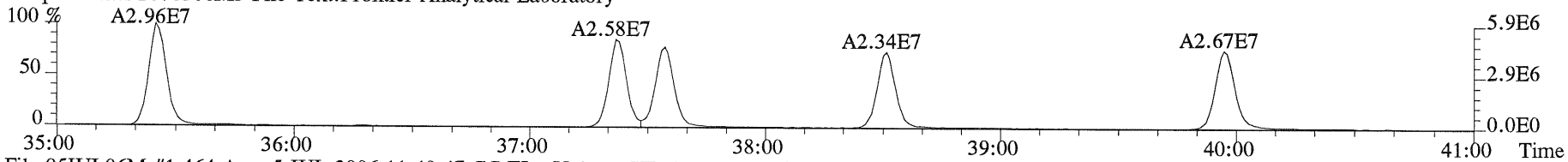
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



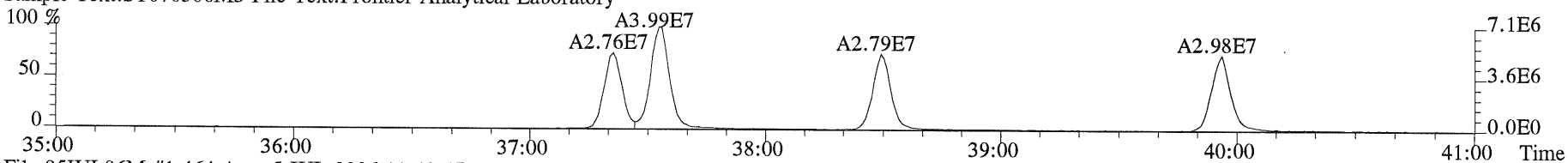
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



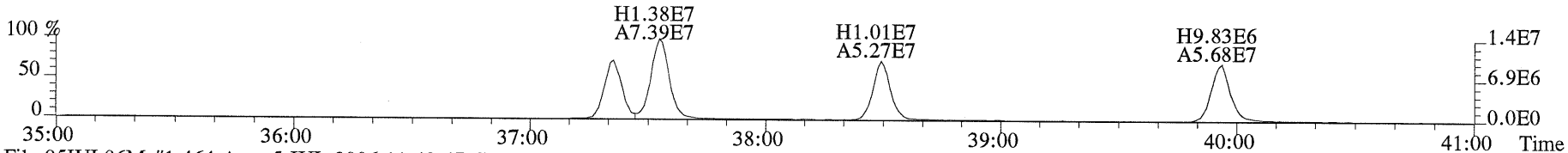
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



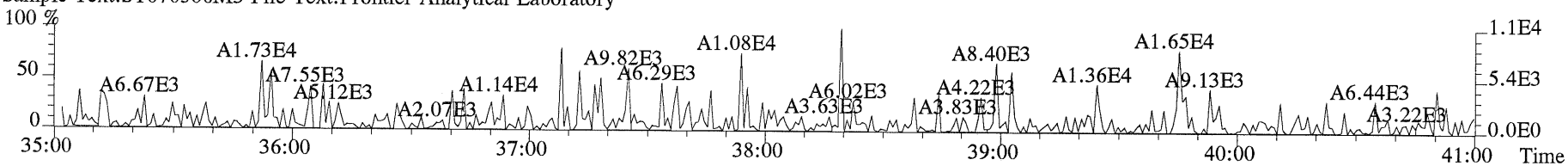
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



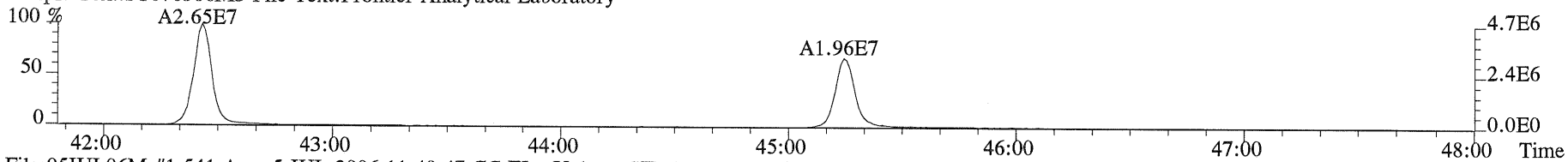
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



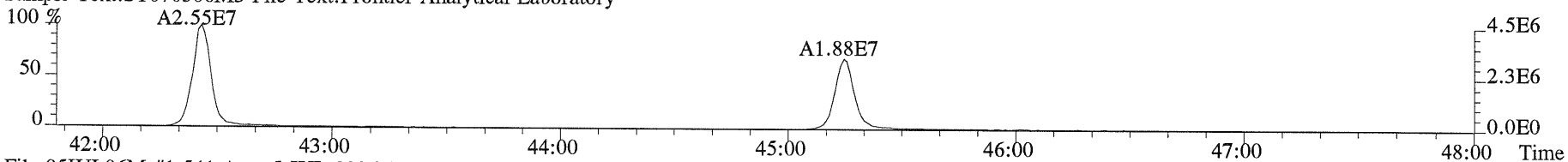
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



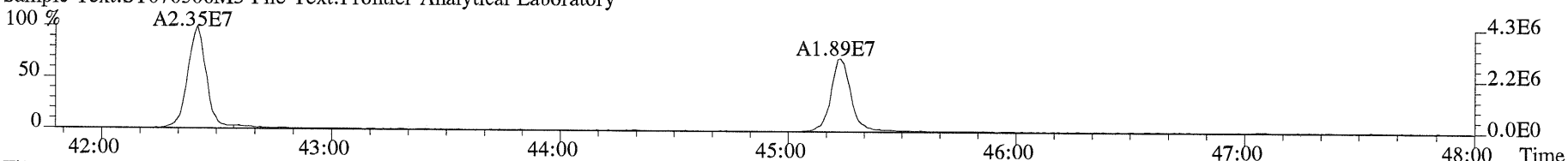
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



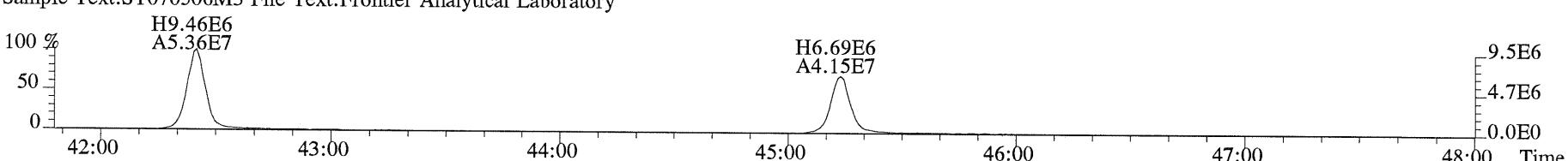
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



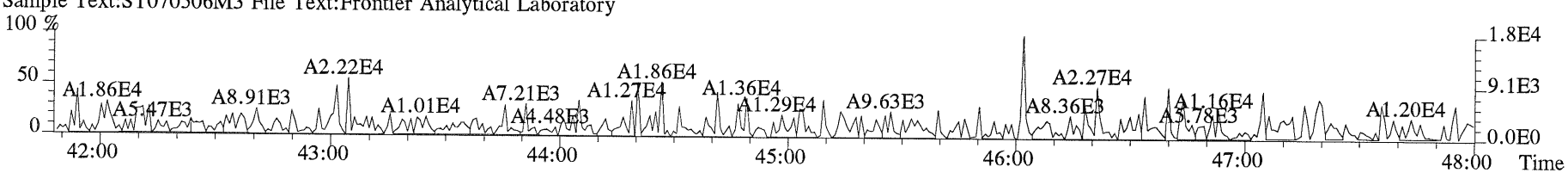
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



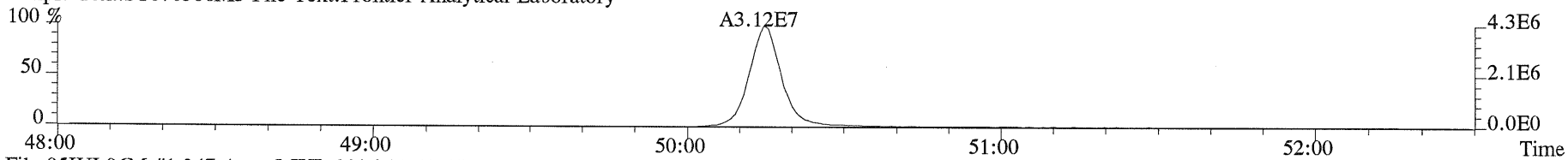
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



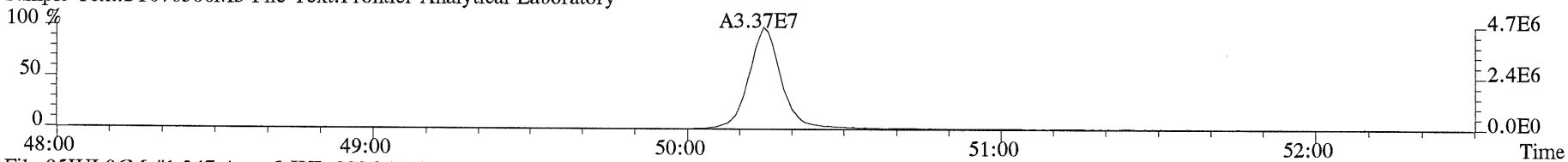
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



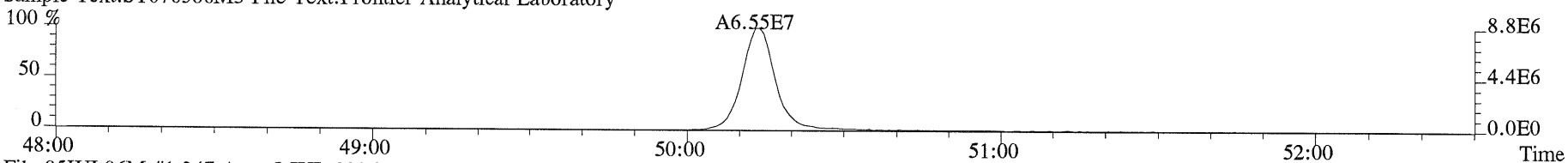
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



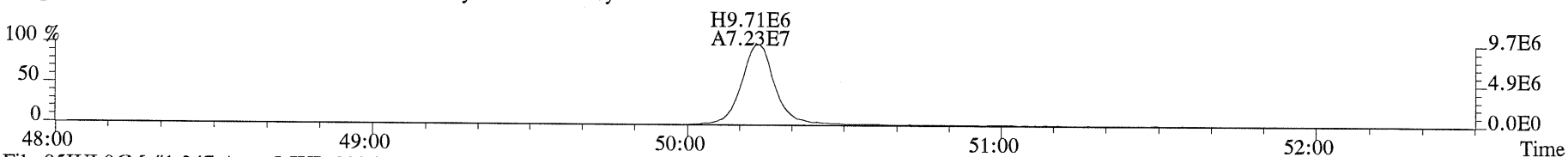
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



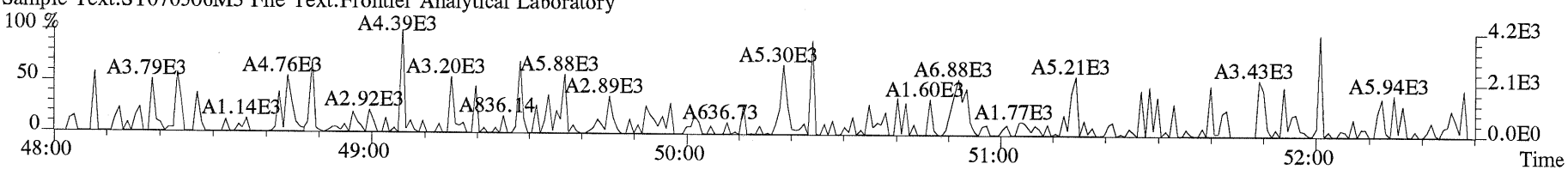
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory

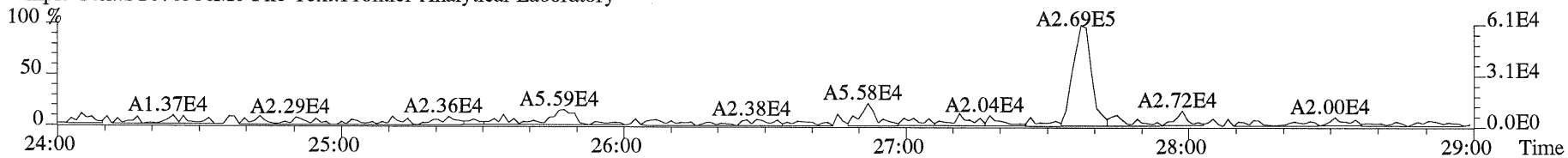


File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory

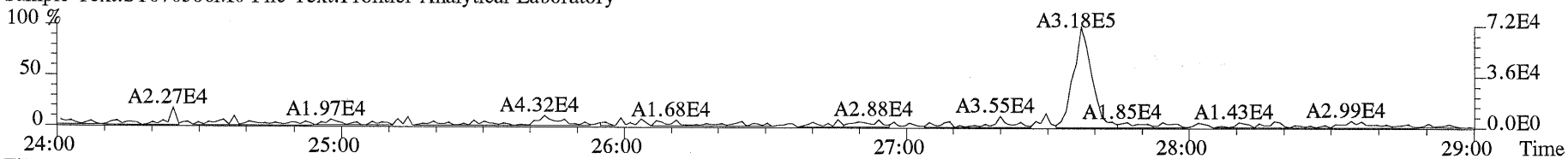


Klamath River Sediment Study

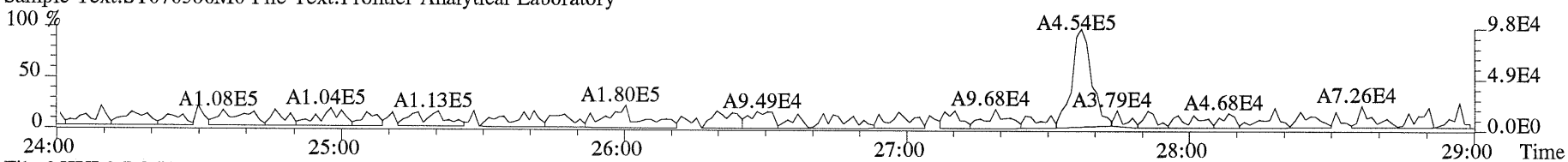
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



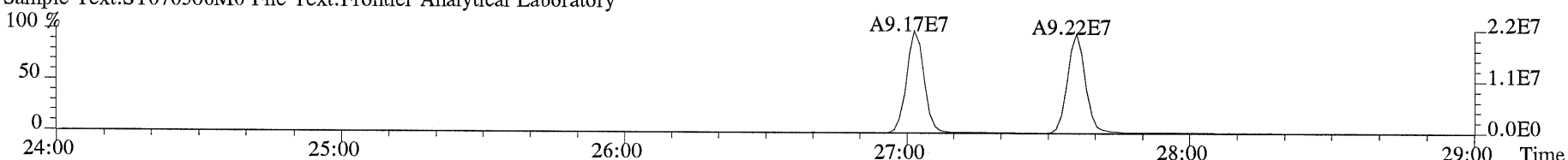
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



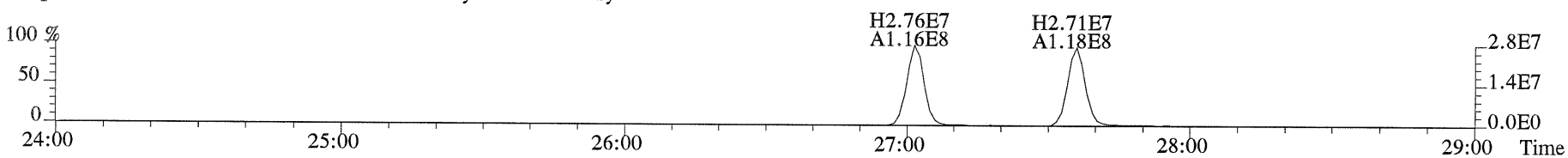
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



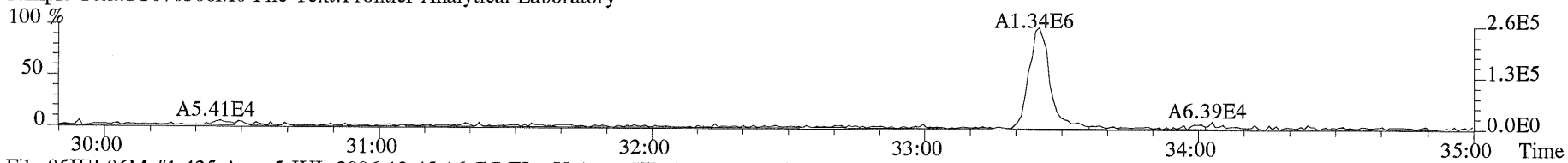
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



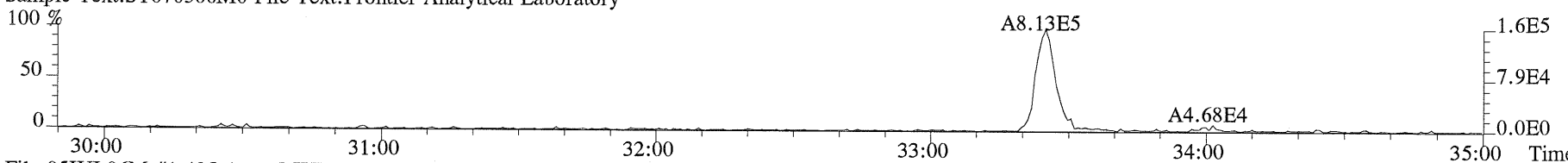
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



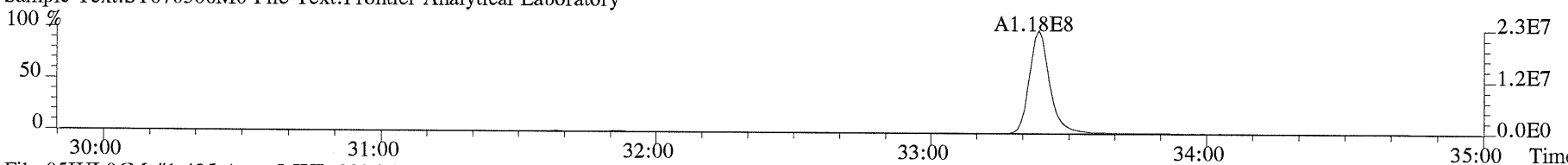
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



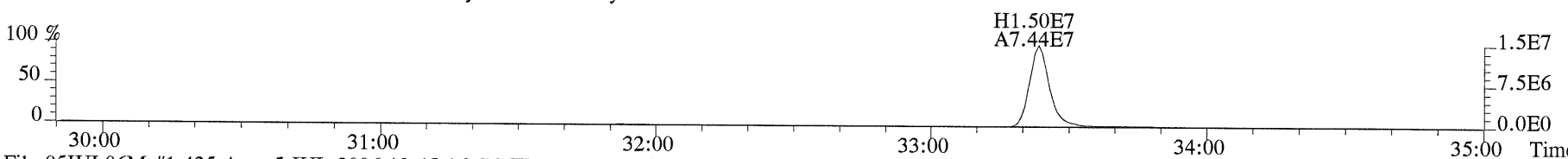
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



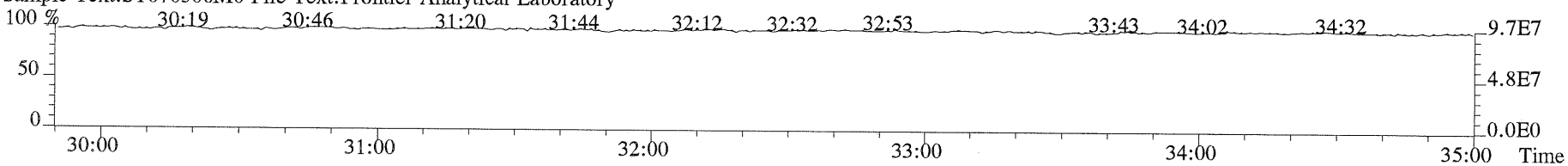
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



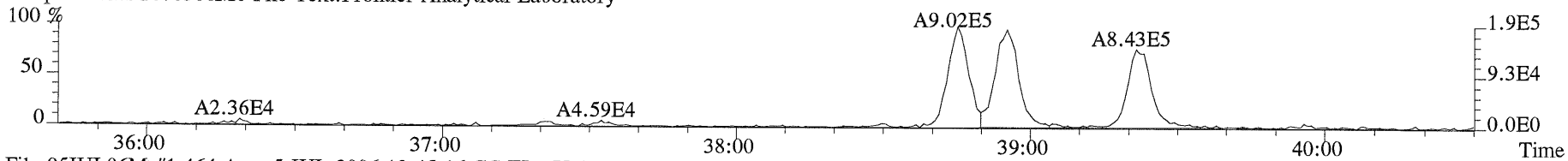
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



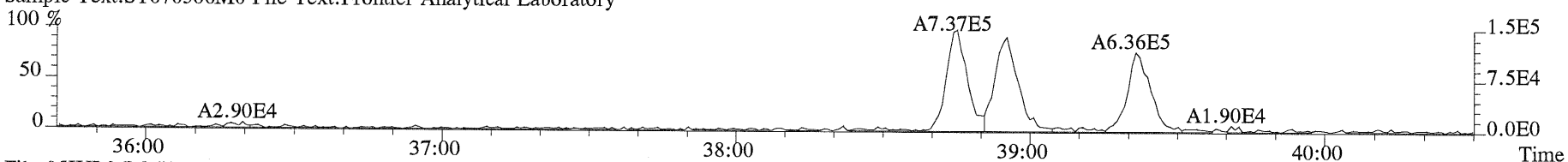
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



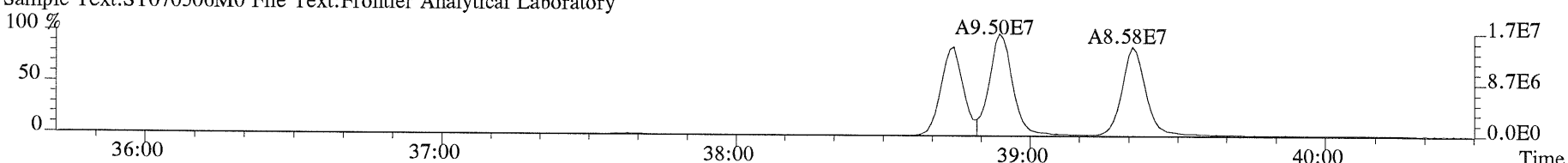
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



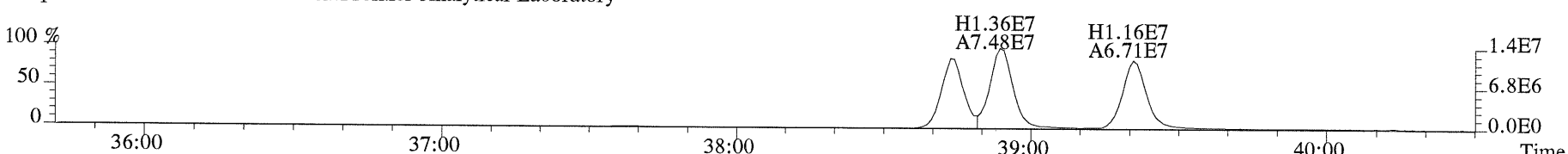
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



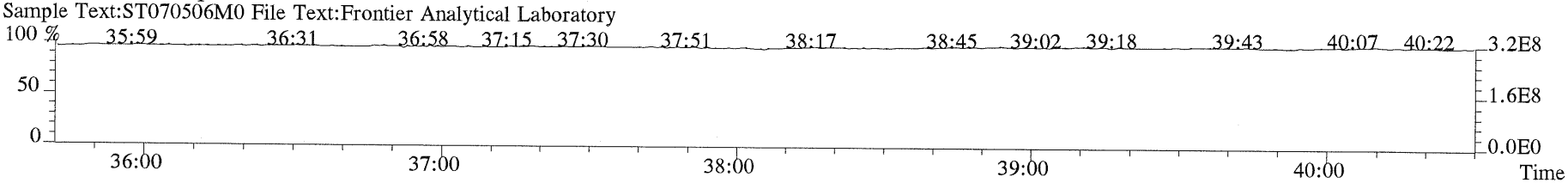
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



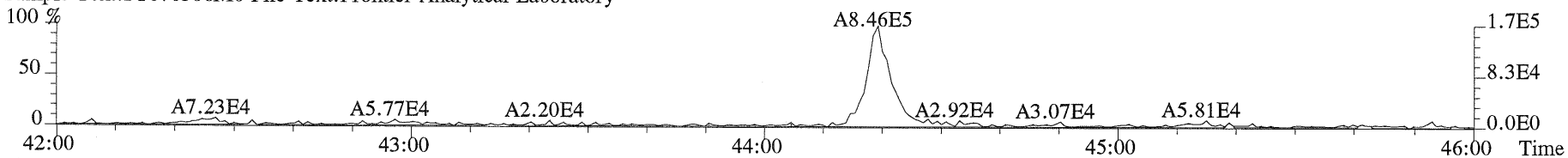
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



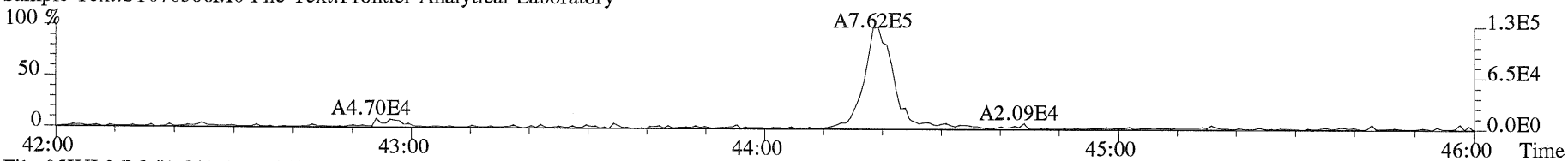
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



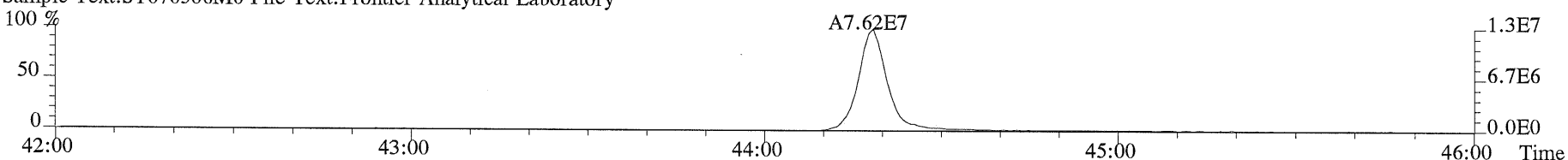
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



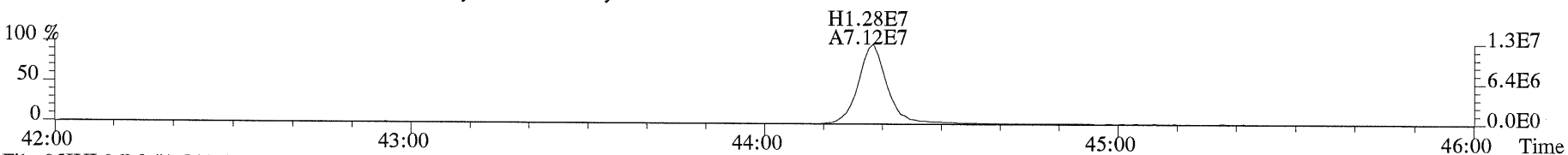
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



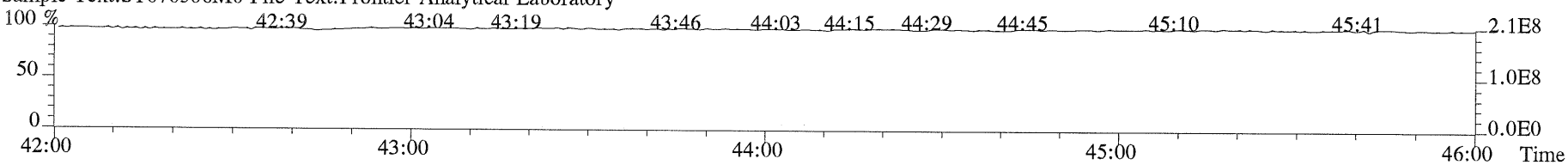
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



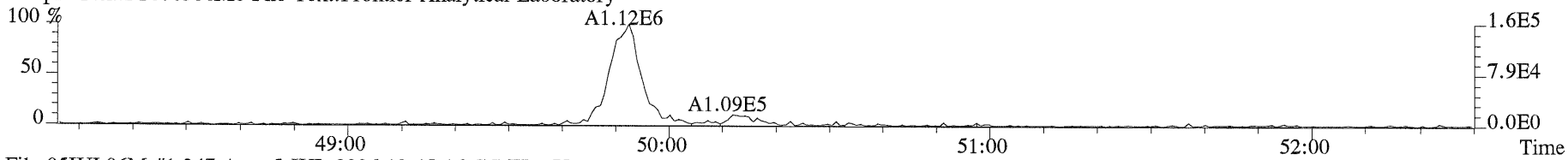
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



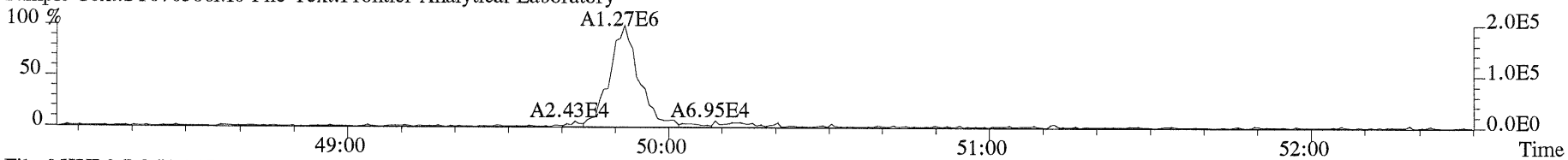
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



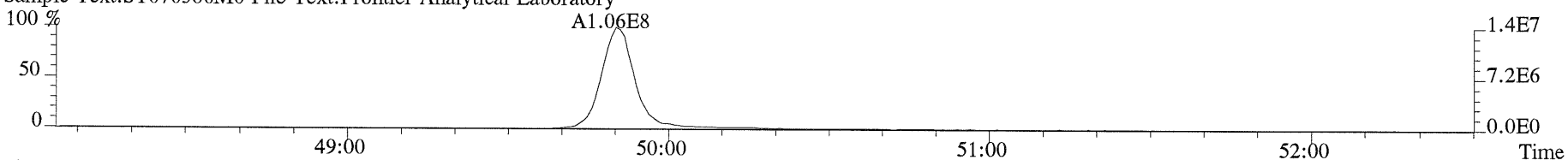
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



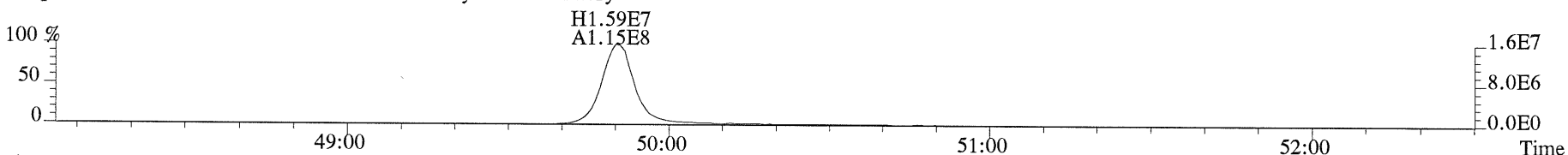
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



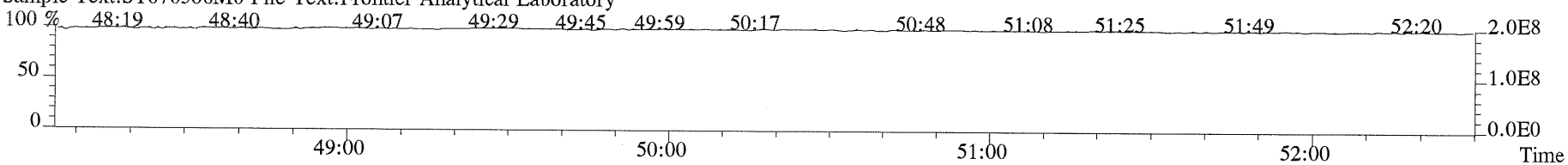
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



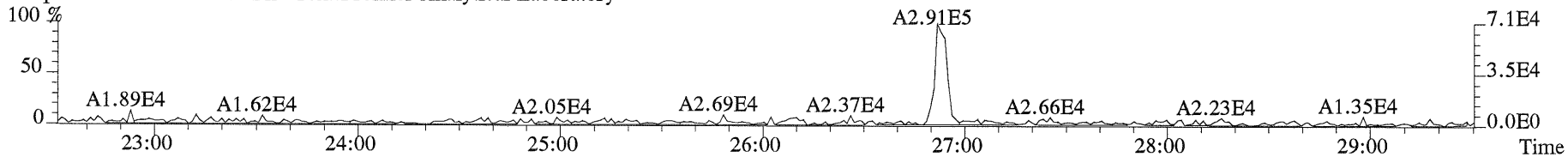
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



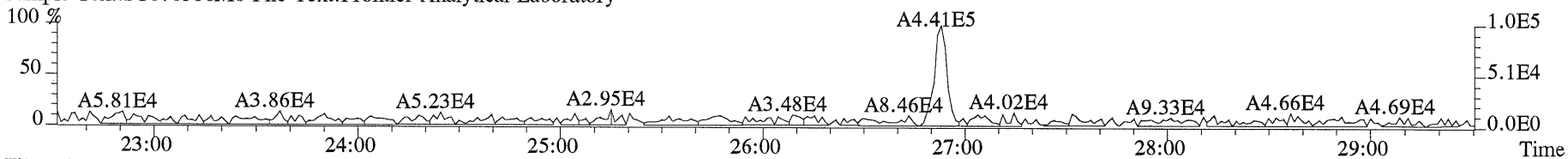
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



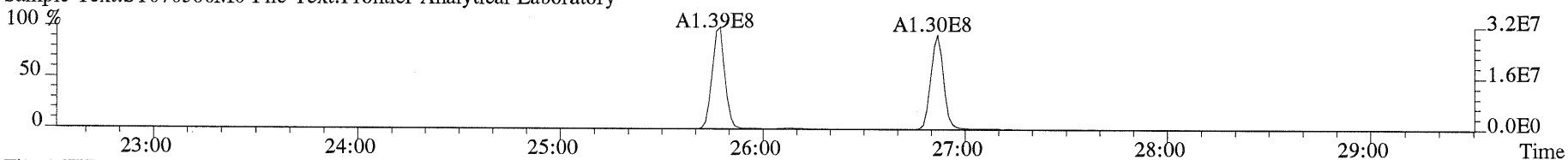
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



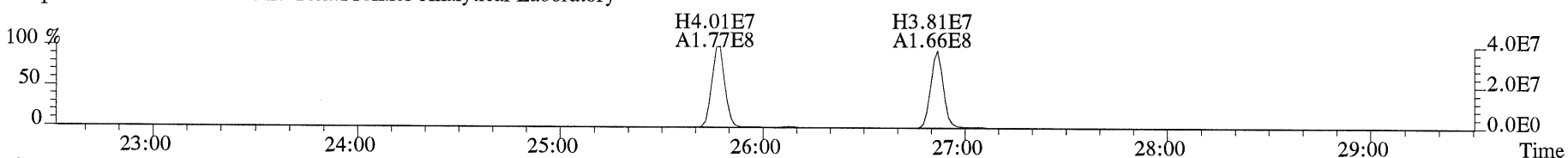
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



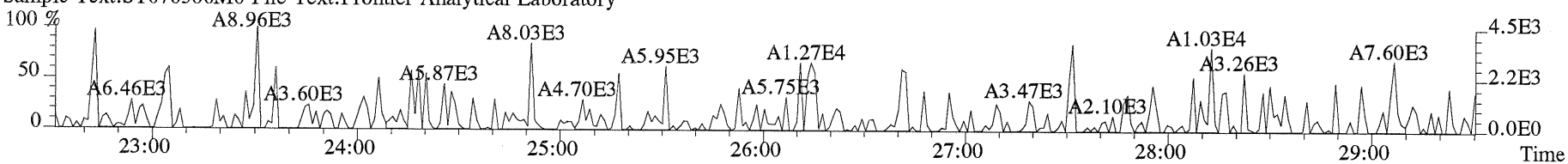
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



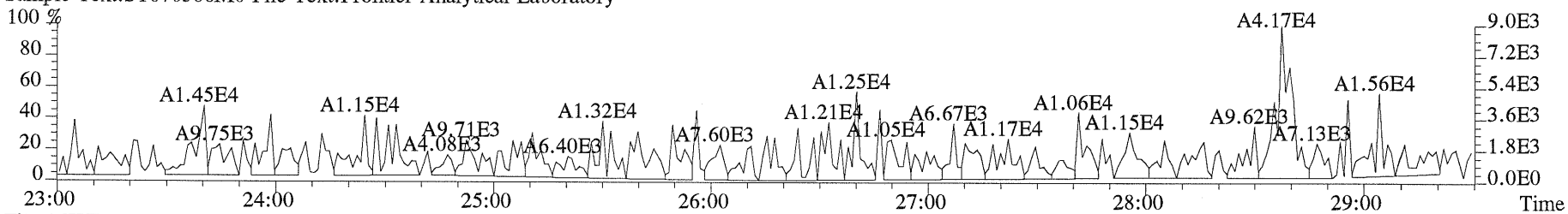
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



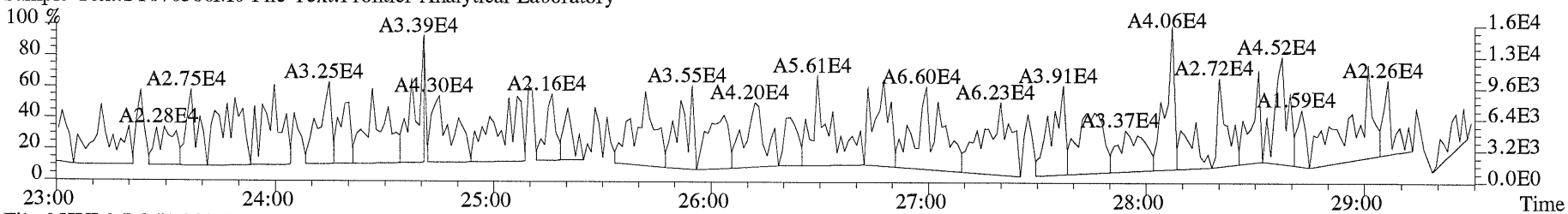
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



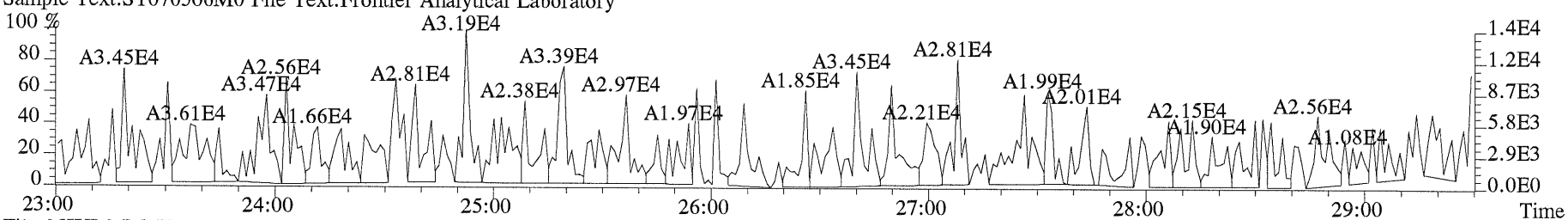
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



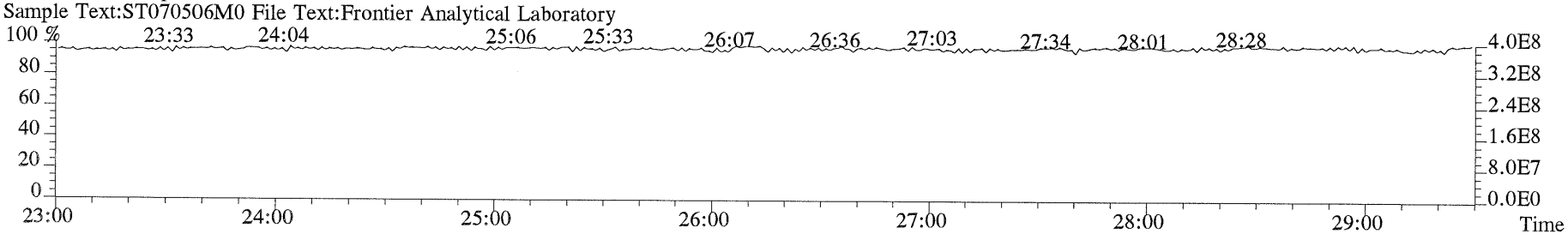
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



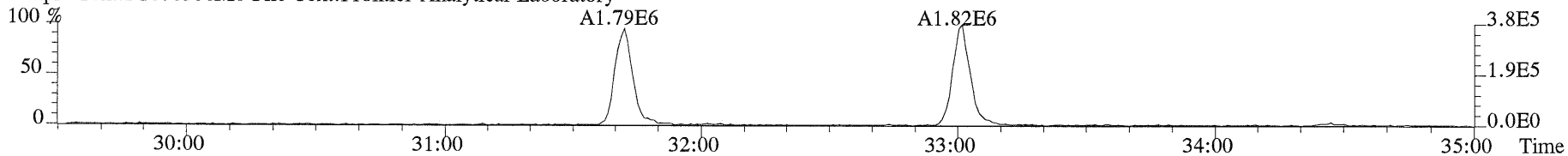
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



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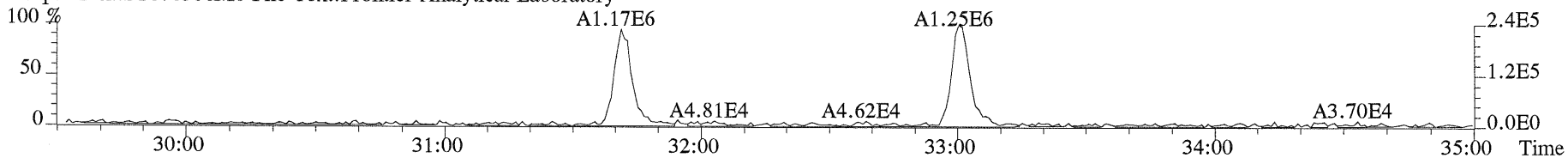
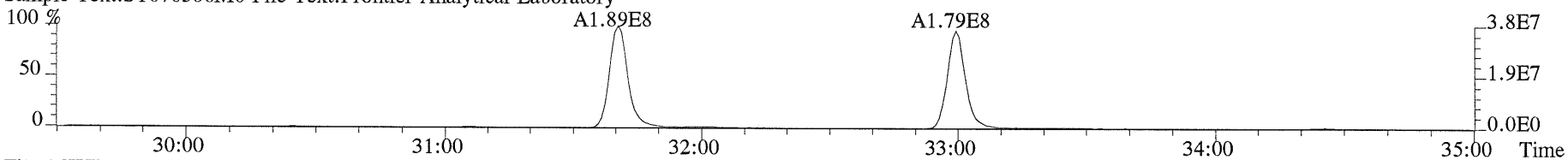
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



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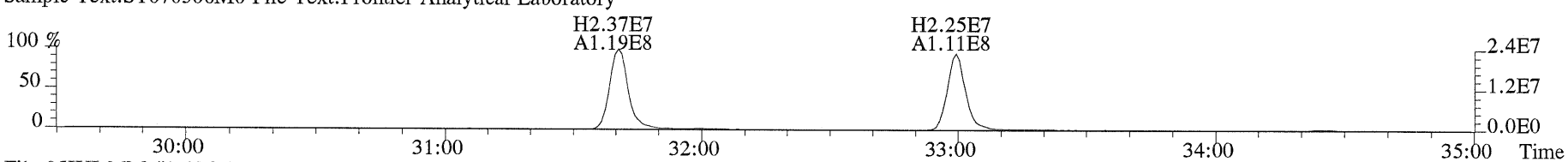
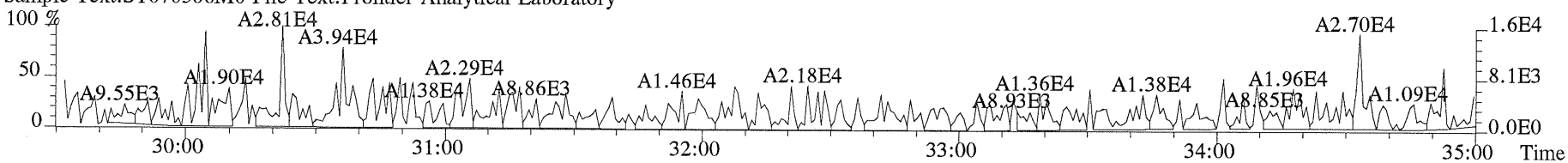
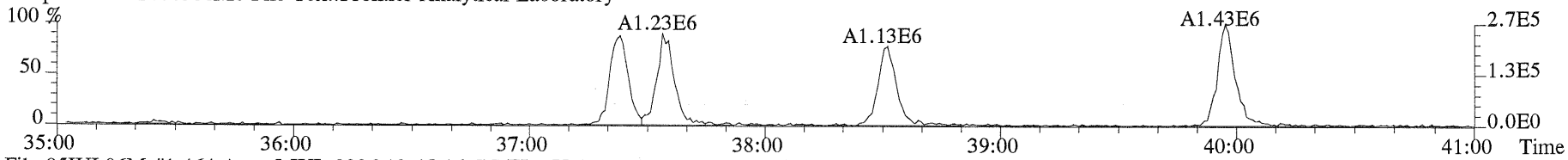
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



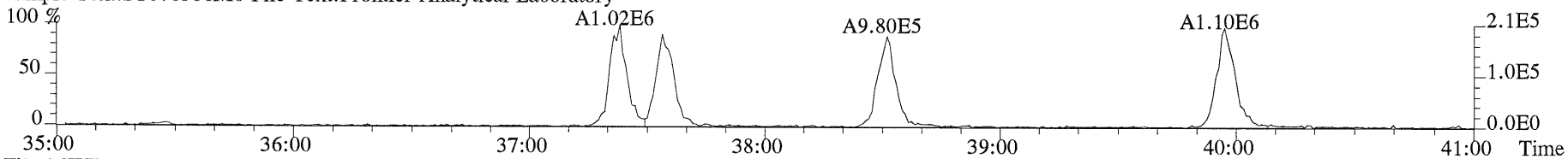
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



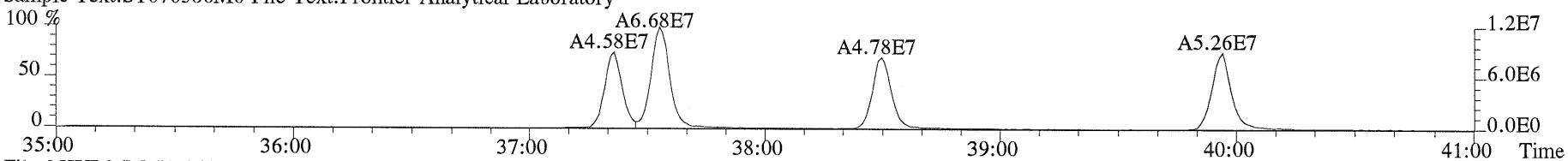
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



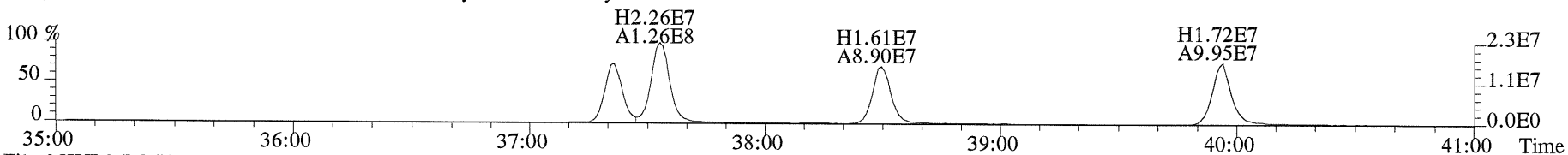
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



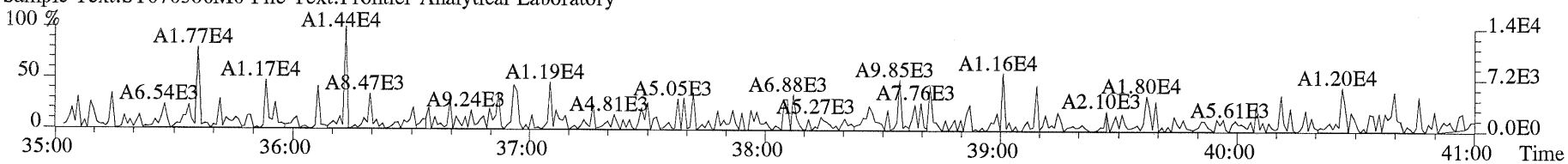
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



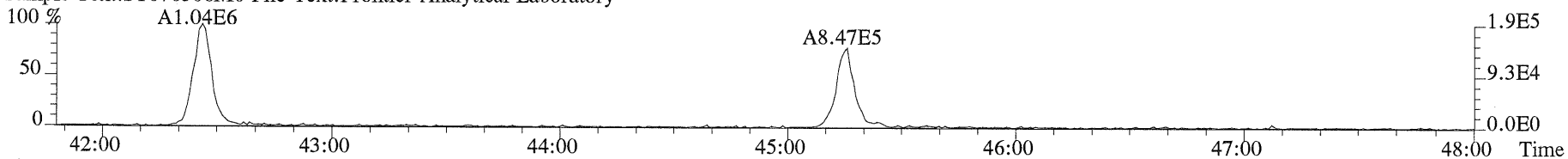
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



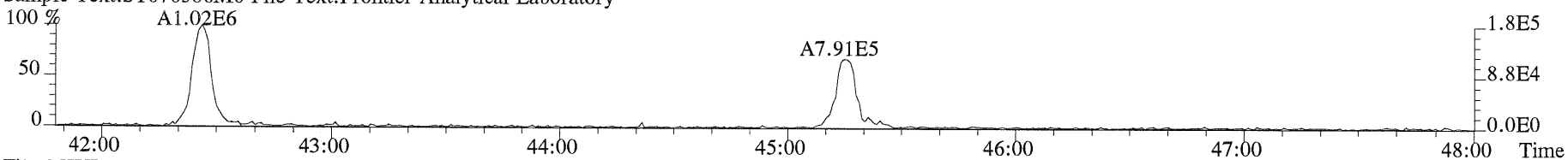
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



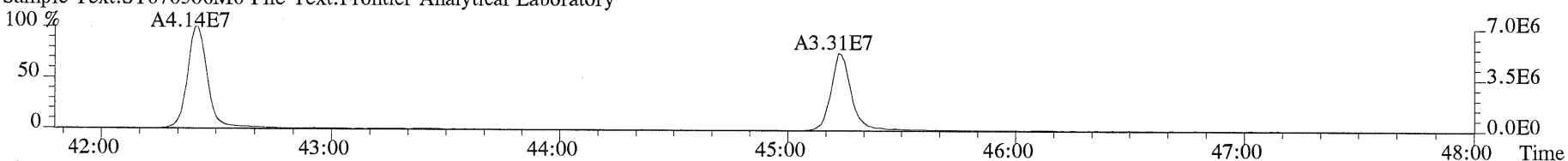
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



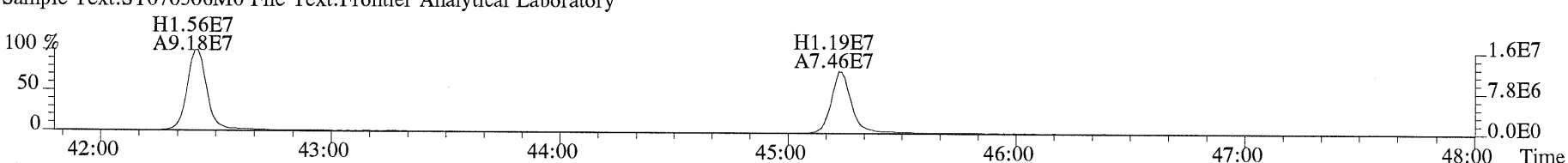
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



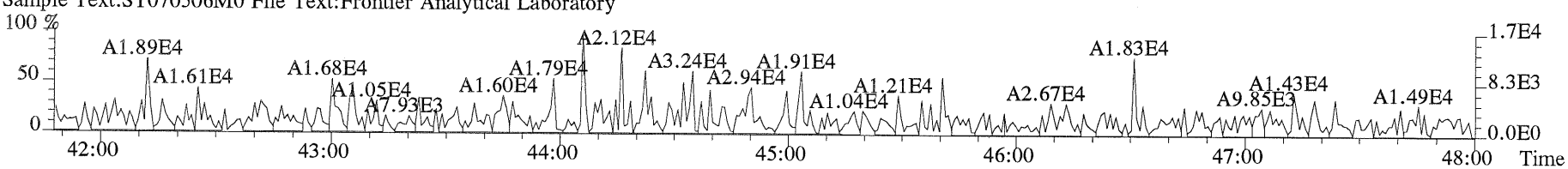
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



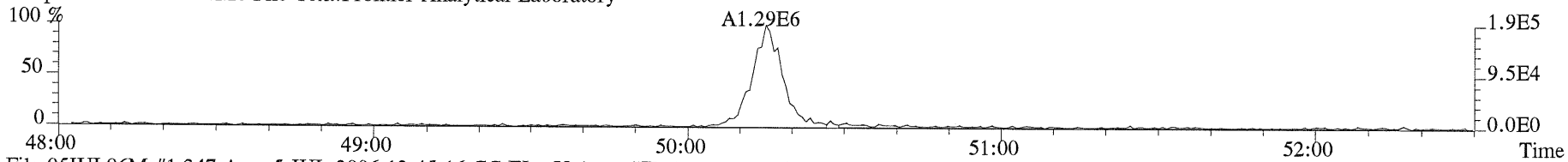
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



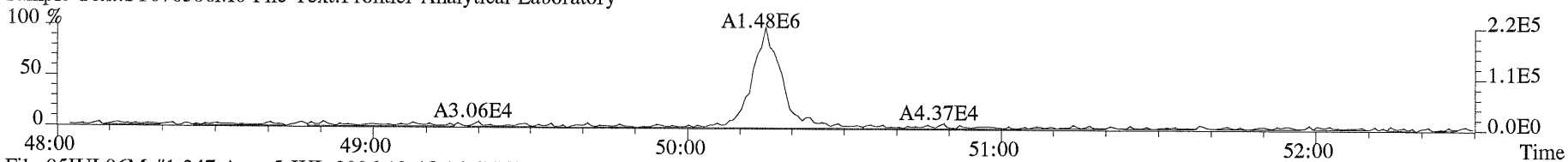
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



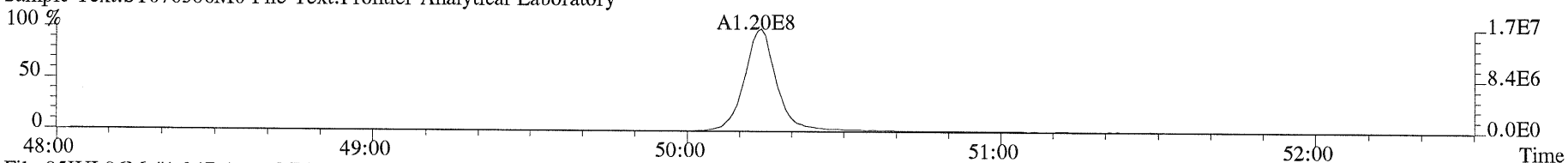
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



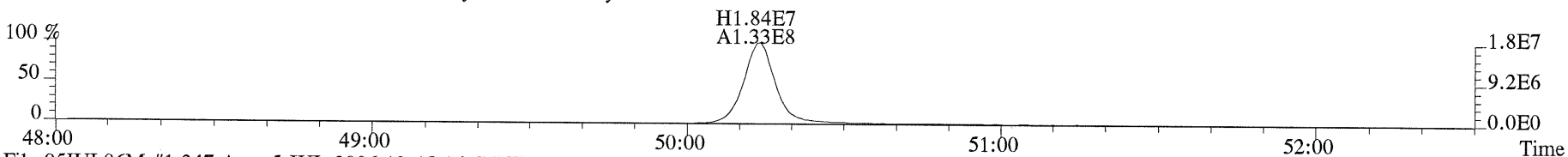
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



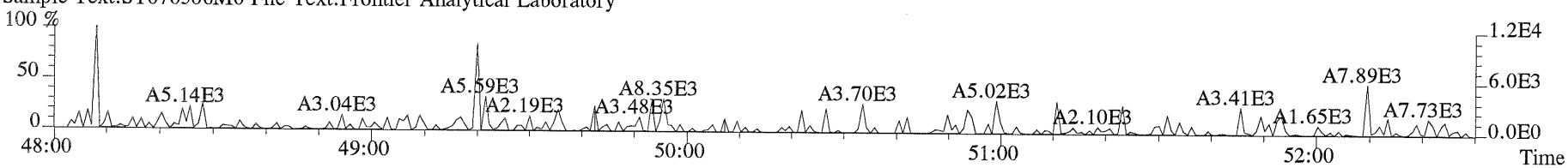
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



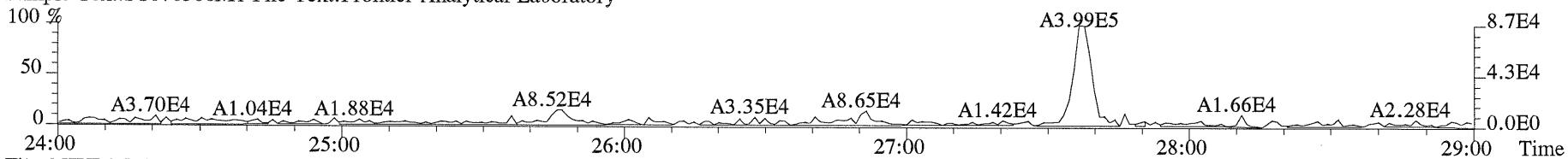
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



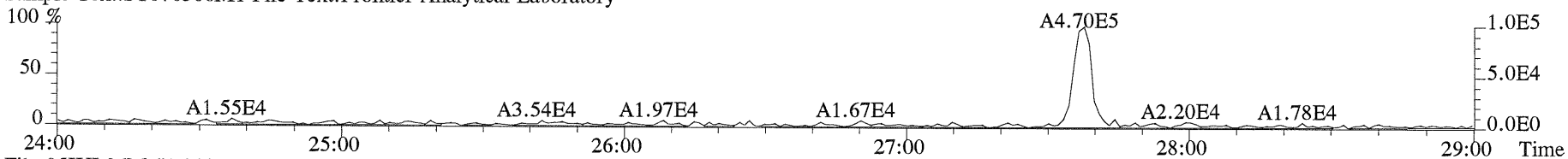
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



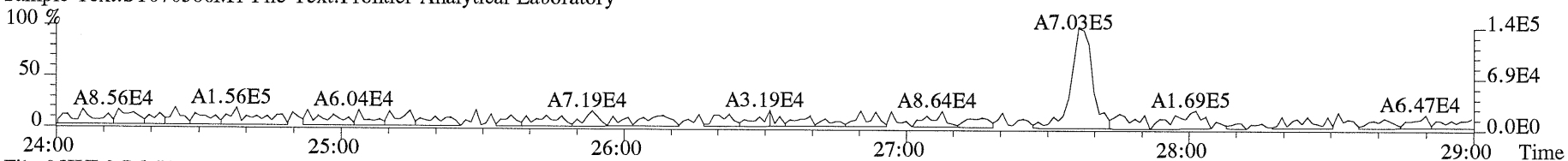
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



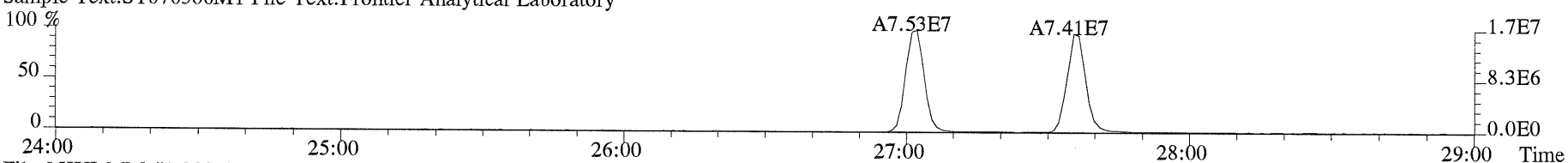
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



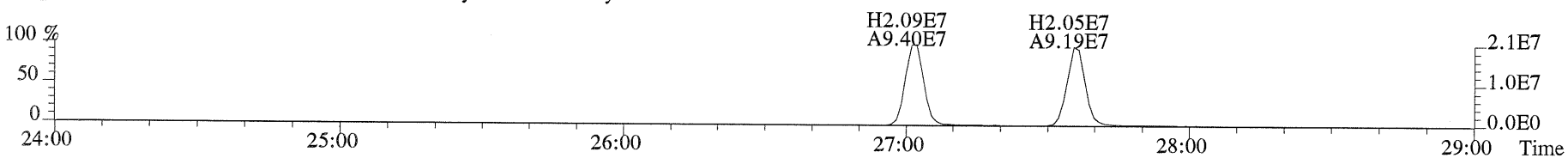
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



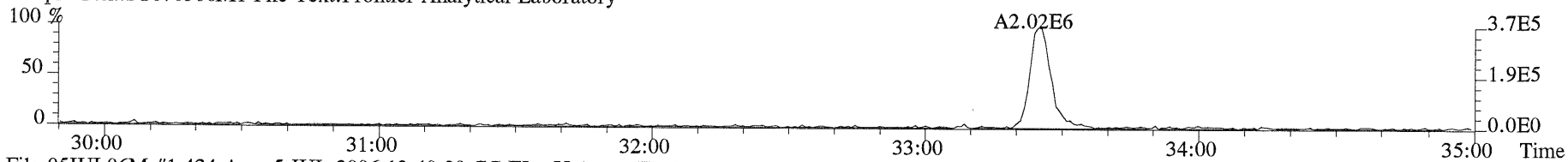
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



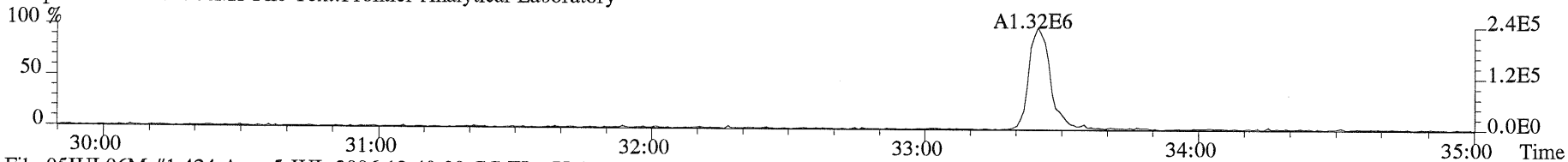
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



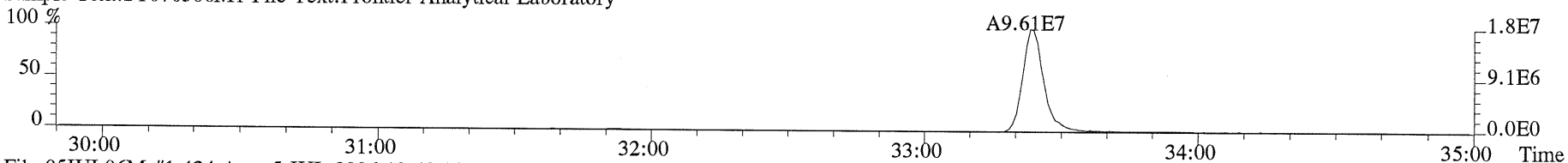
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



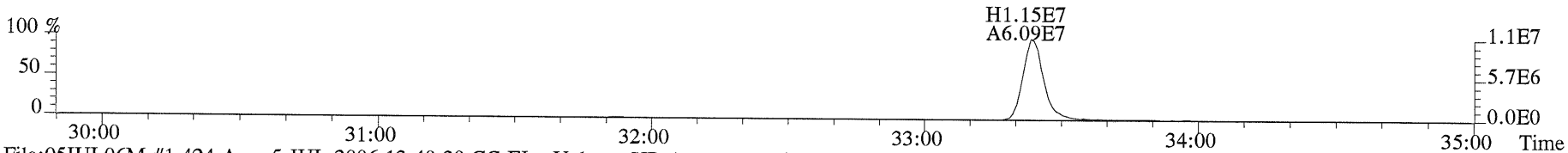
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



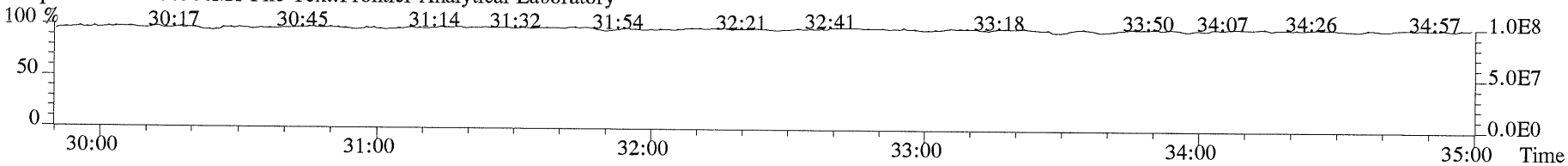
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



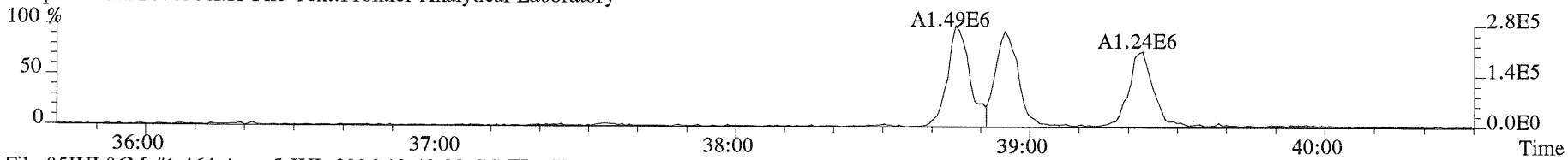
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



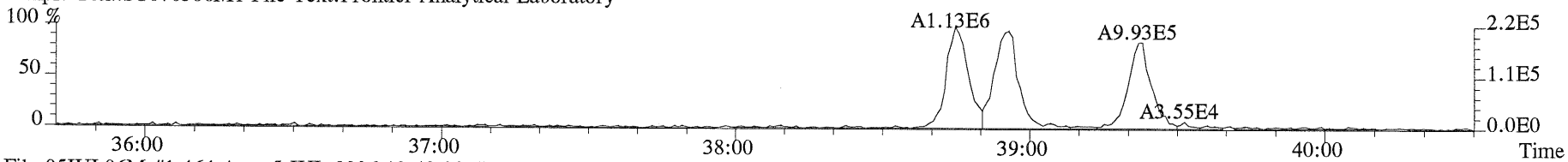
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



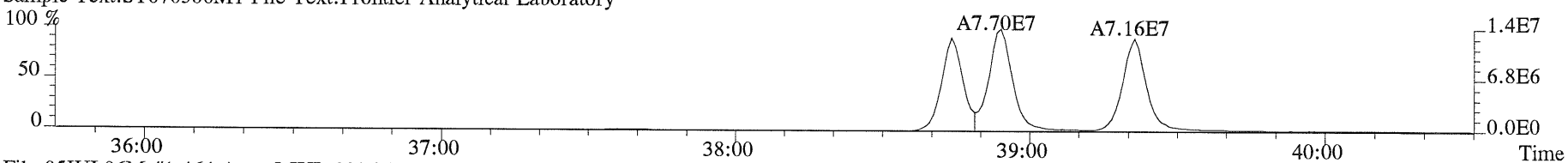
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



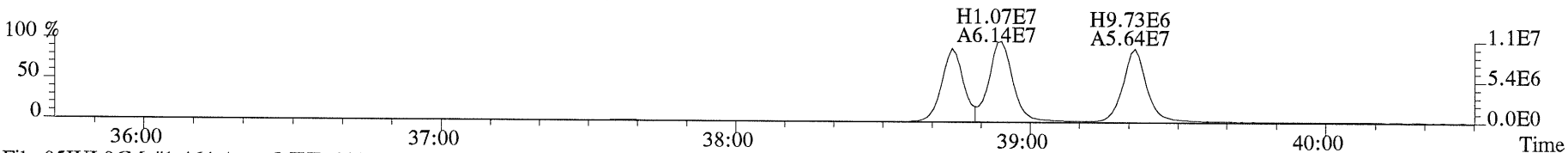
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



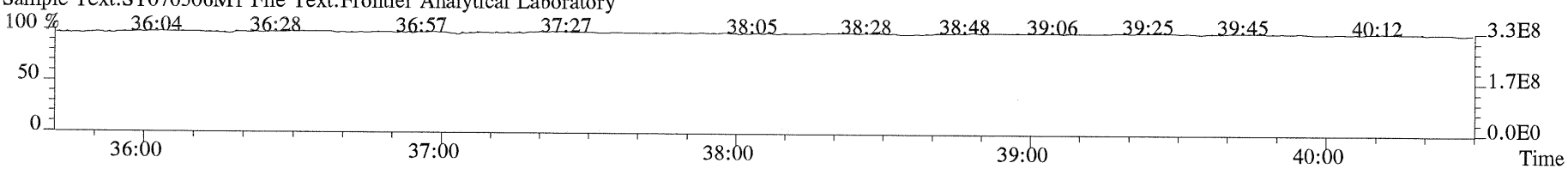
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

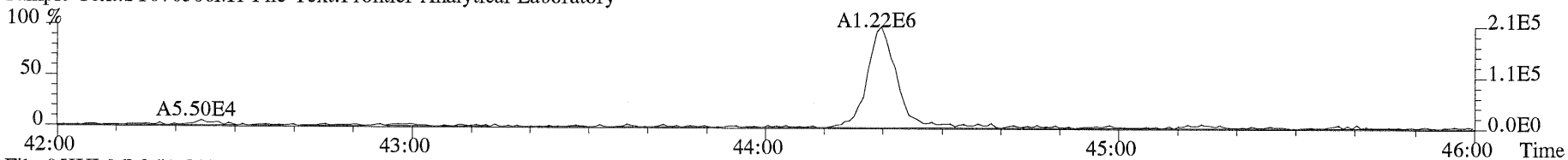


File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

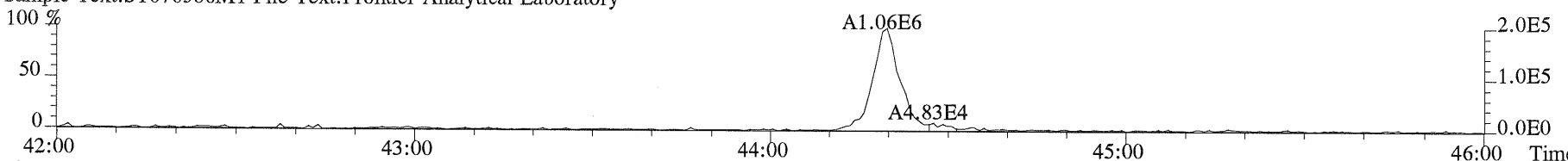


220

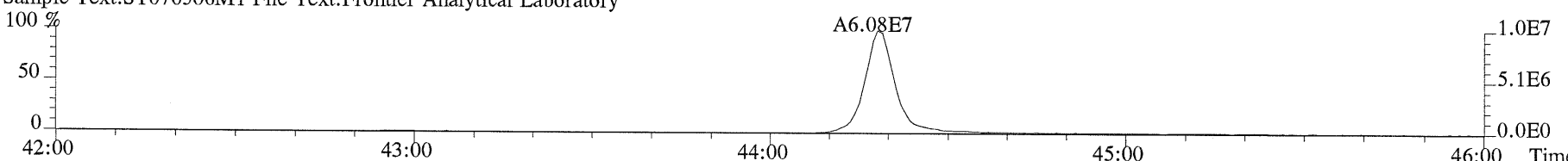
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



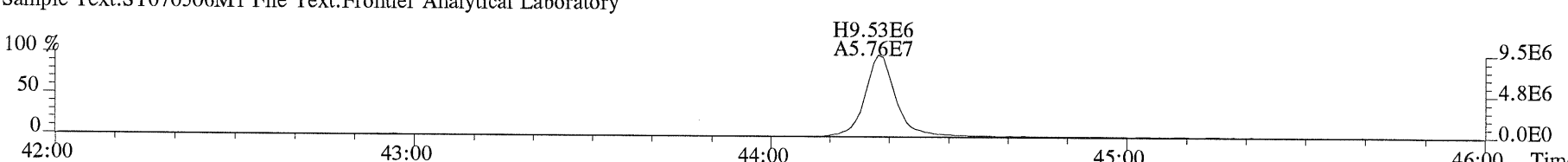
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



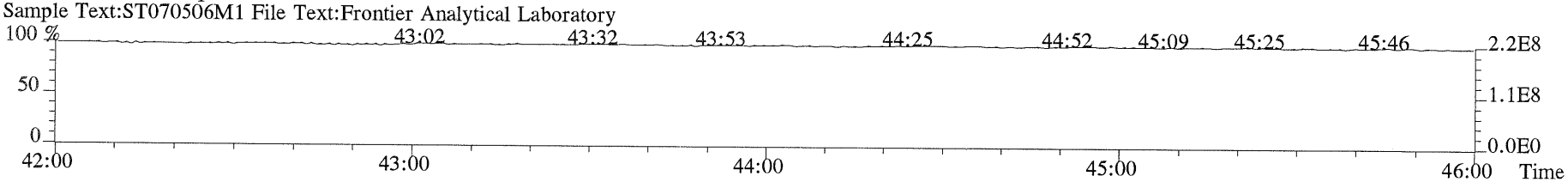
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



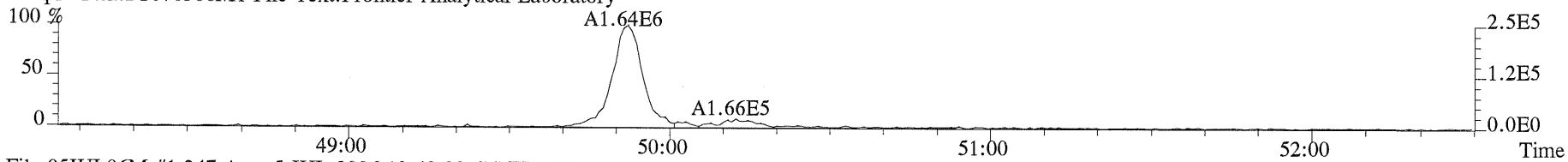
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



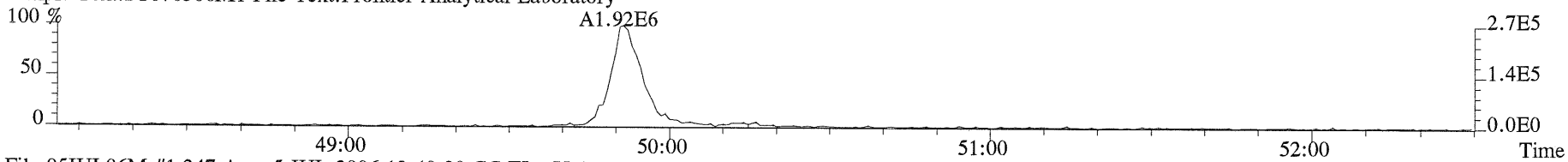
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



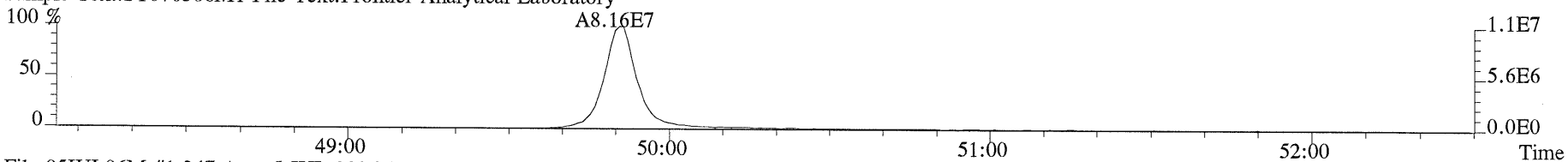
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

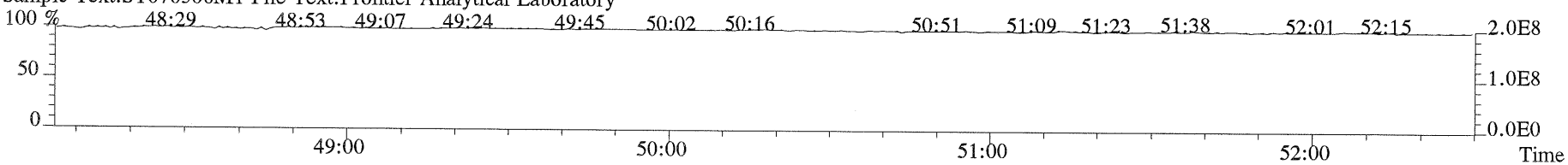


File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

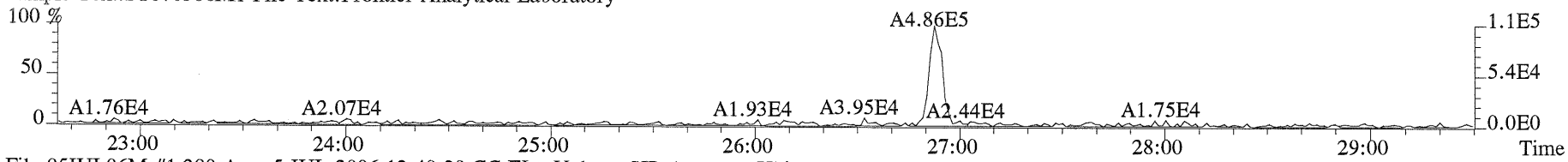


File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

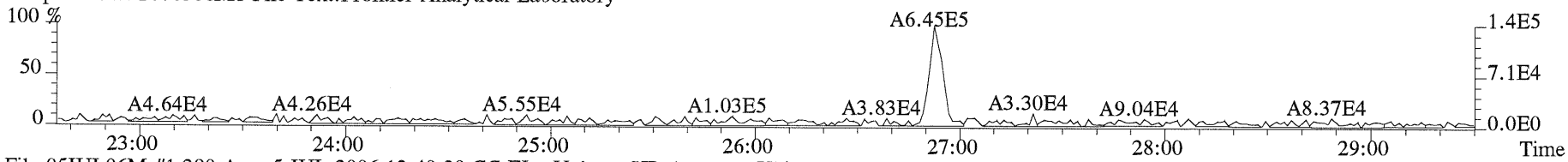
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



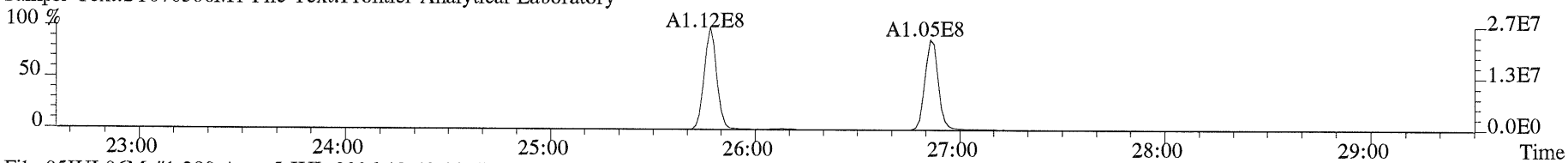
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



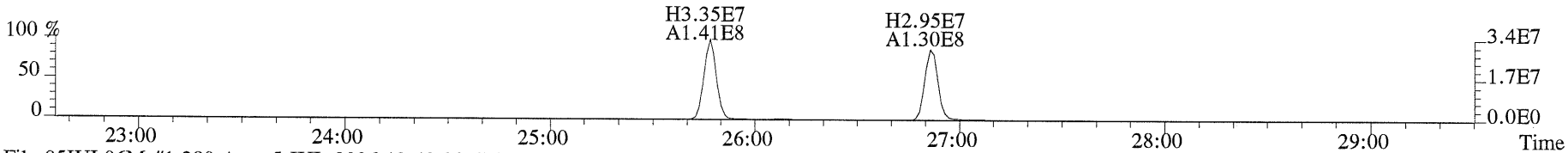
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



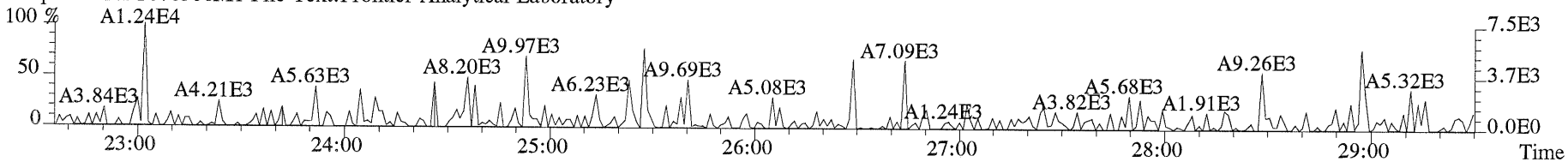
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



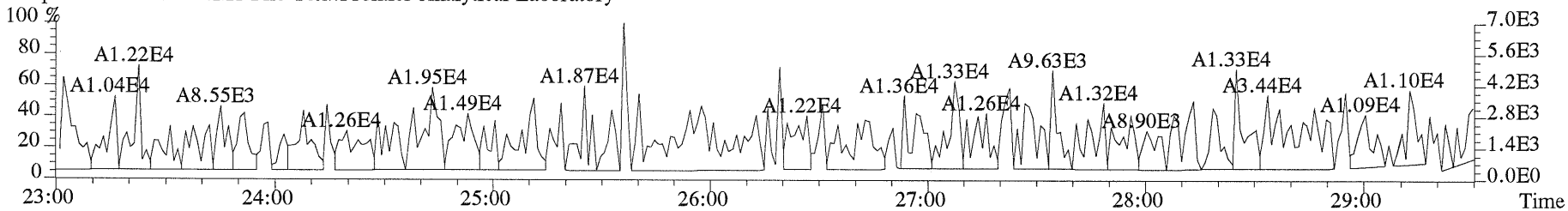
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



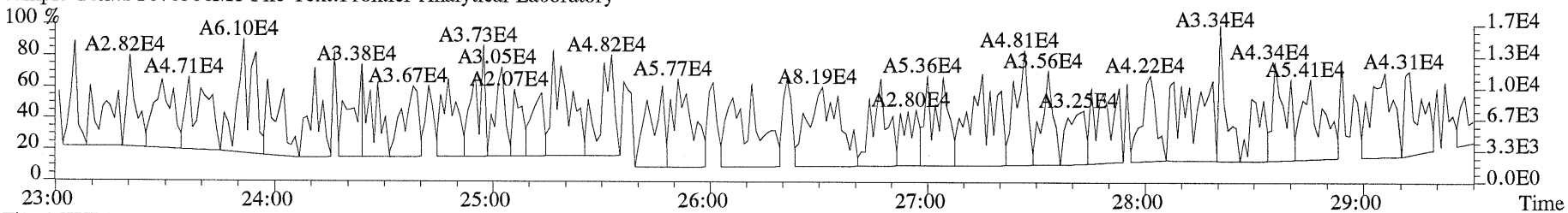
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



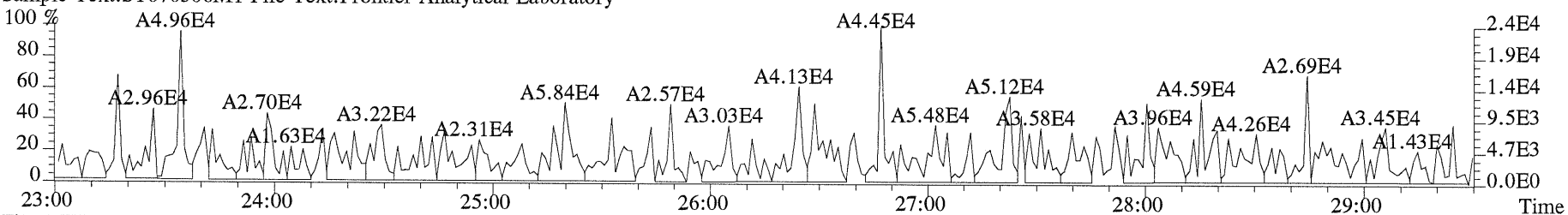
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



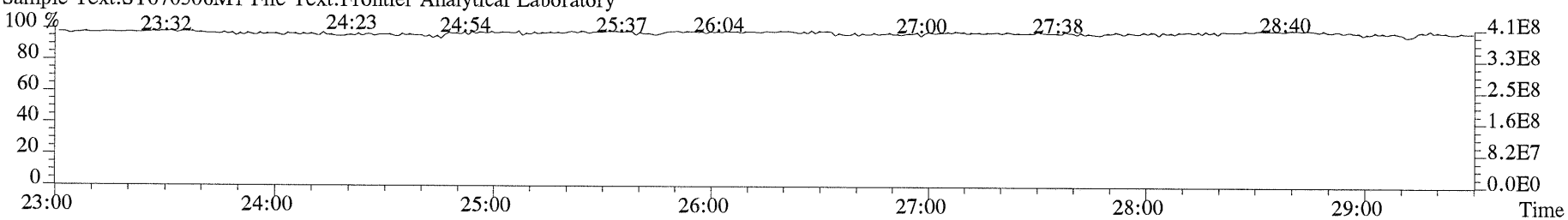
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



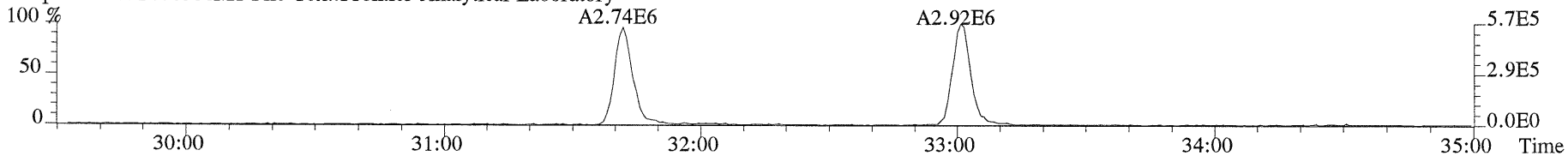
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



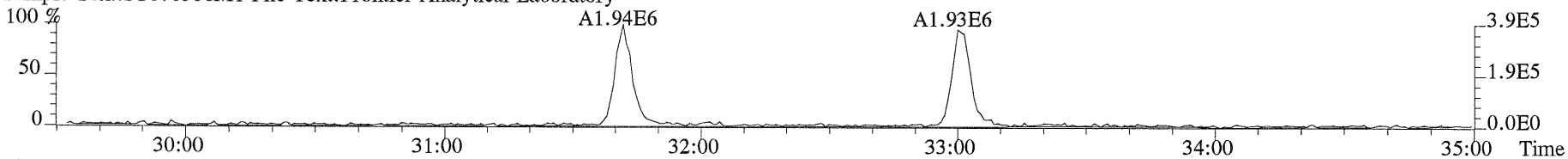
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



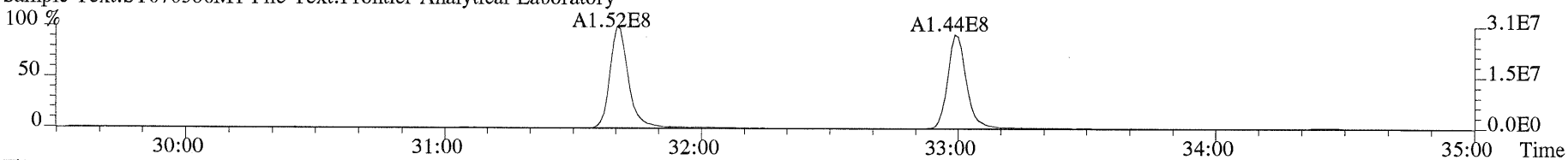
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



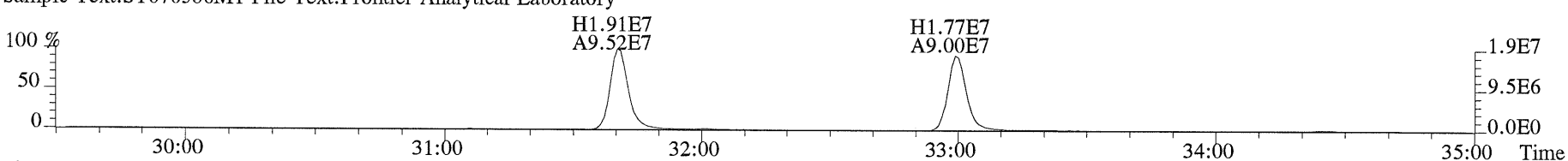
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



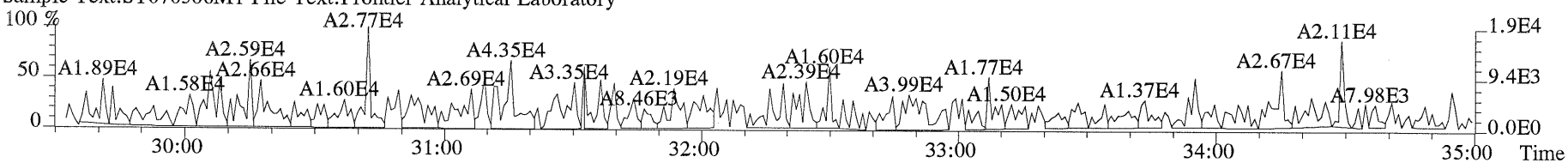
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



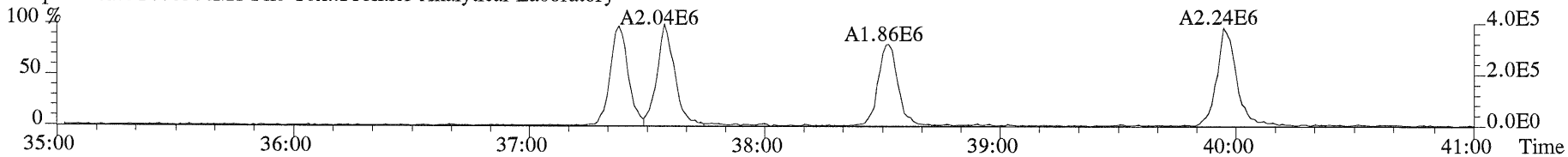
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



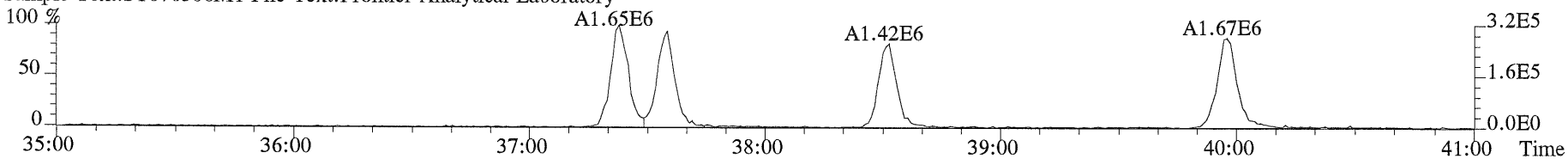
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



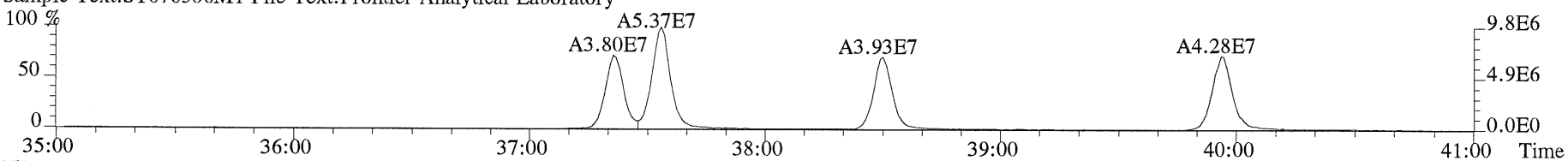
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



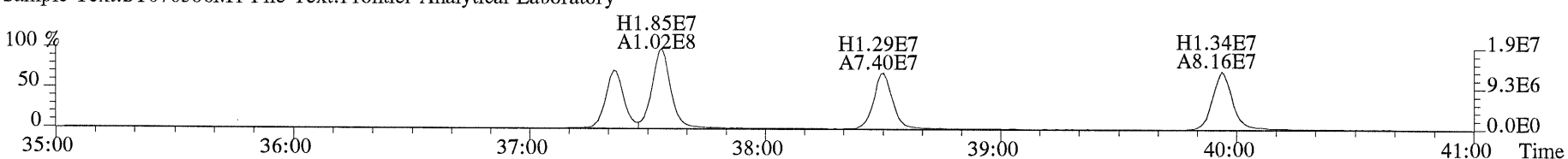
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



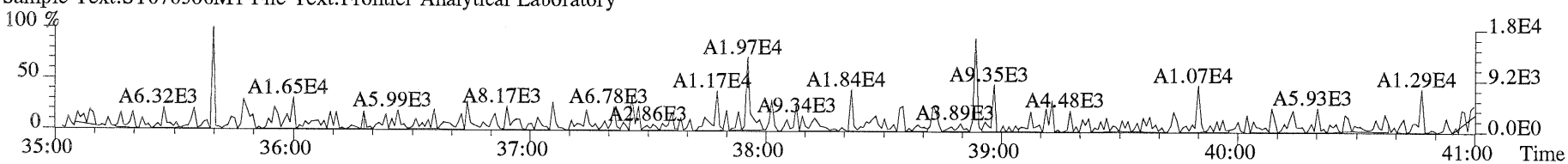
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



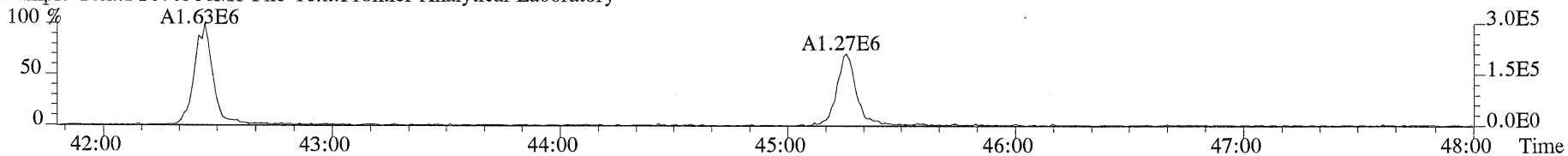
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



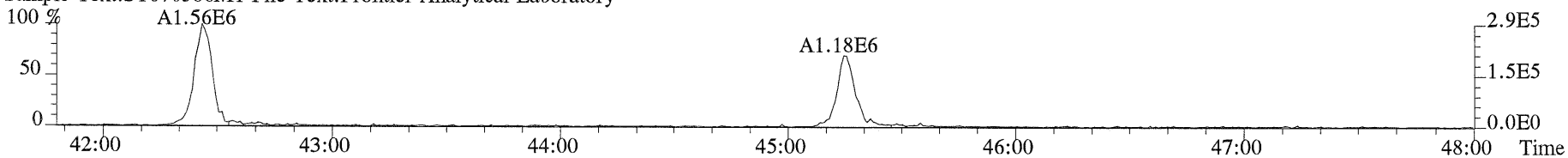
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



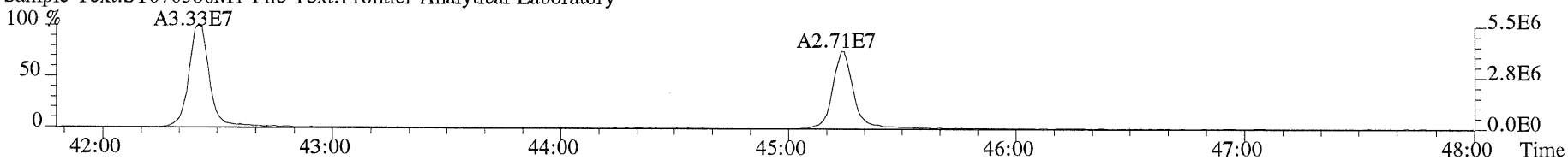
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



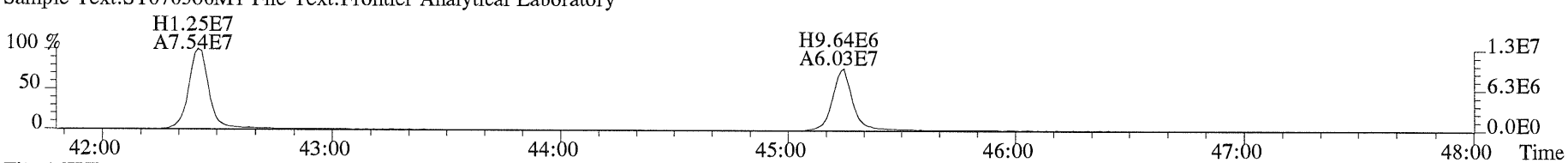
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



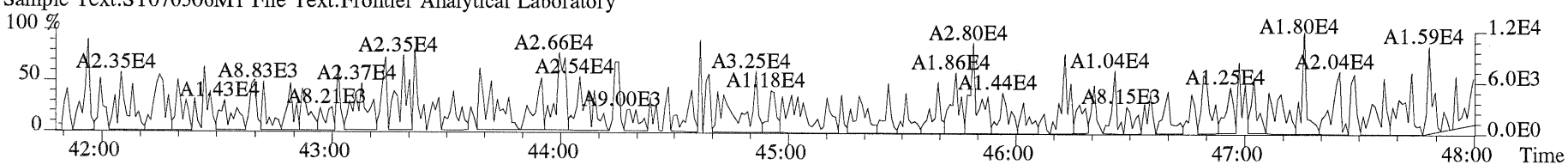
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



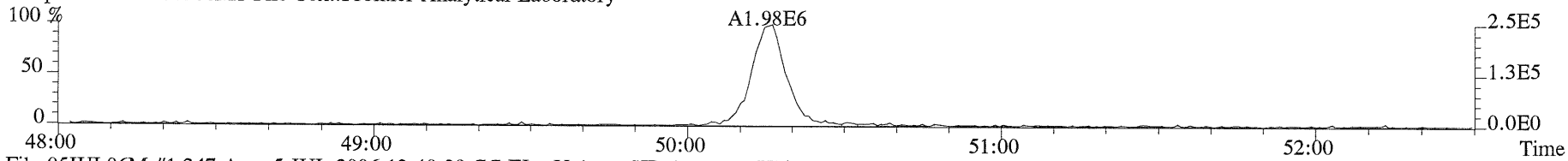
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



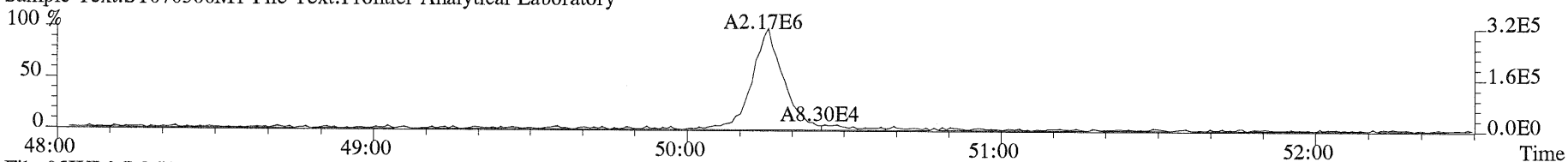
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



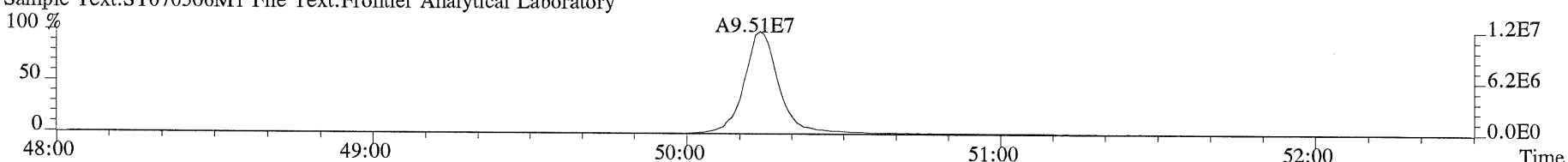
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



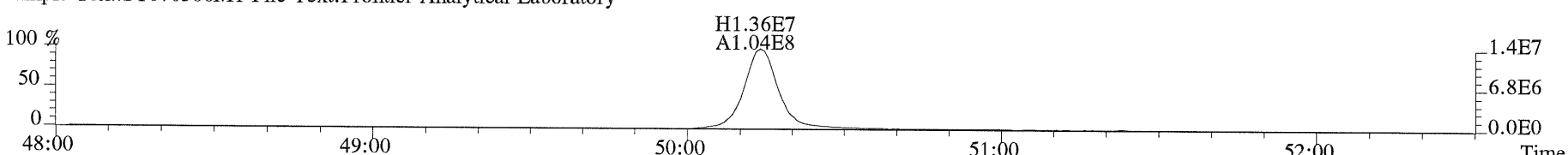
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



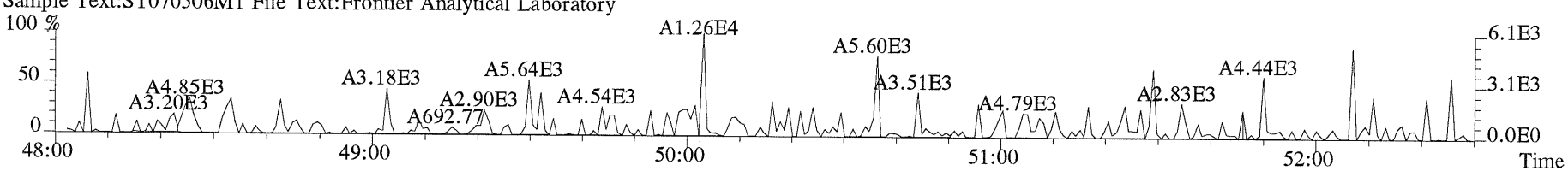
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



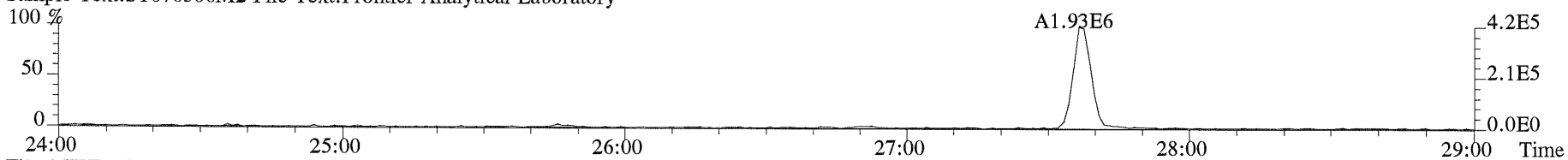
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



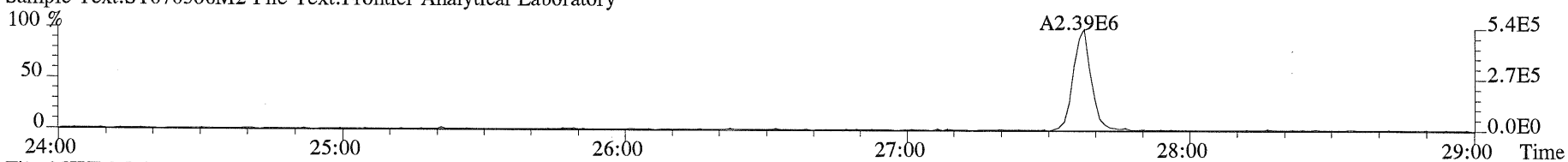
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



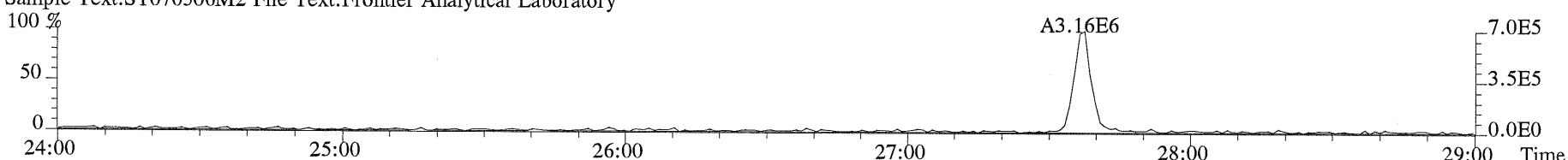
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



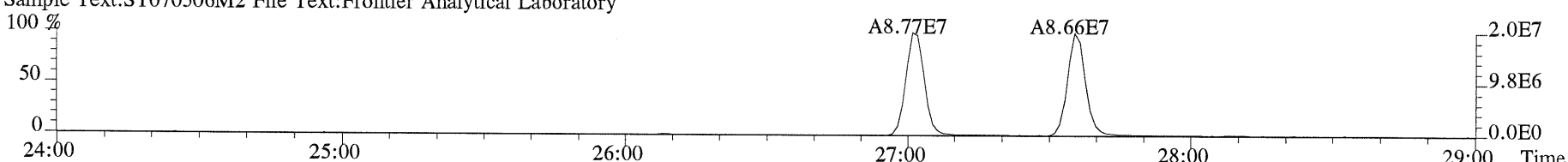
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



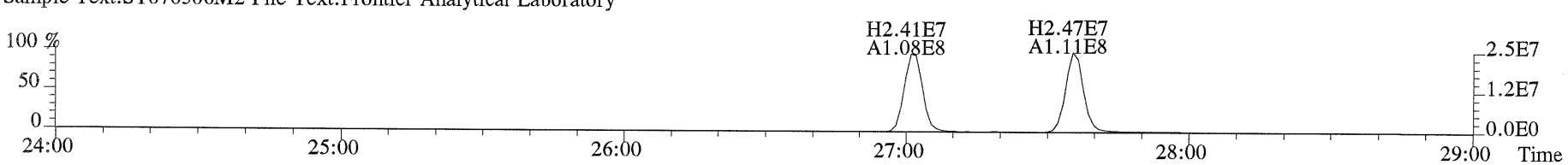
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



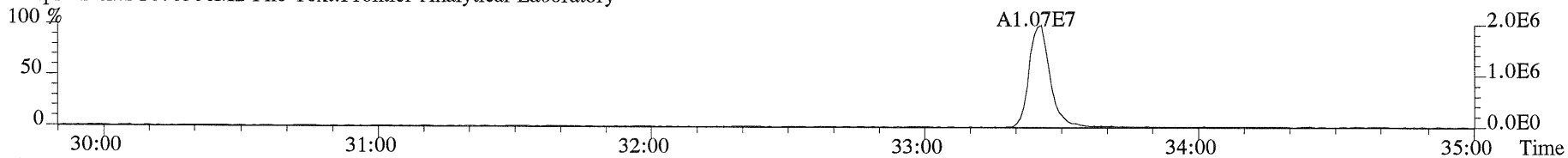
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



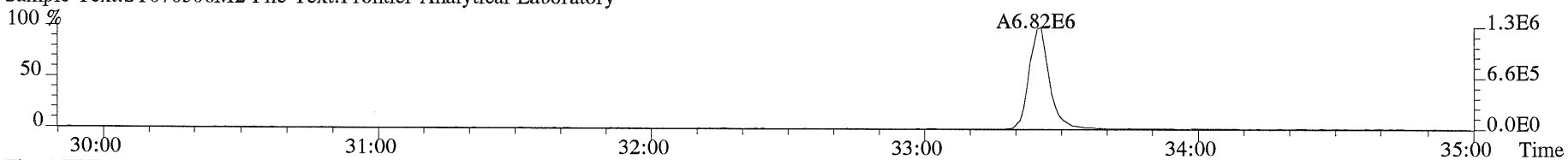
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



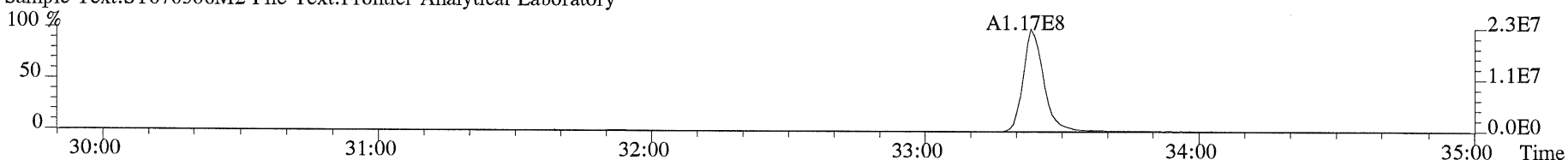
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



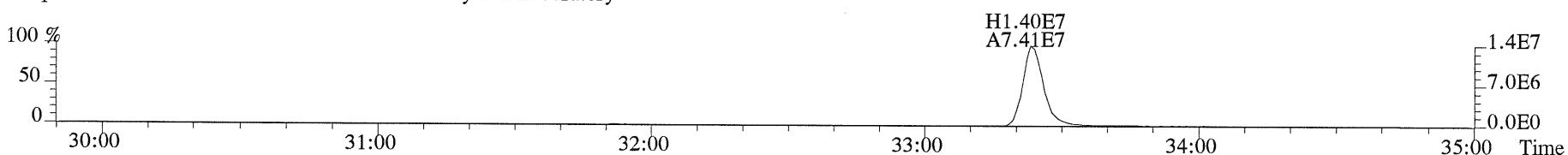
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



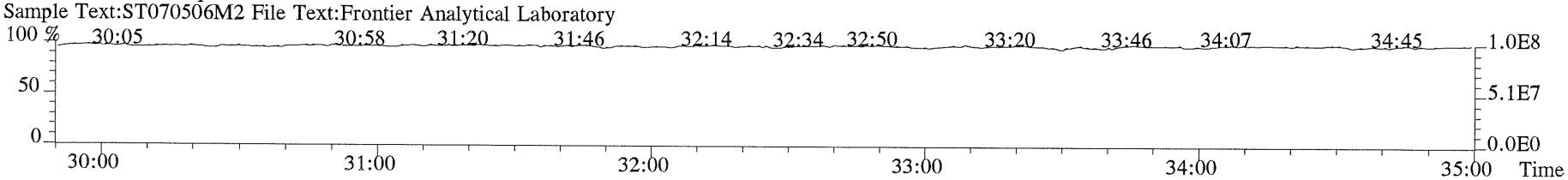
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



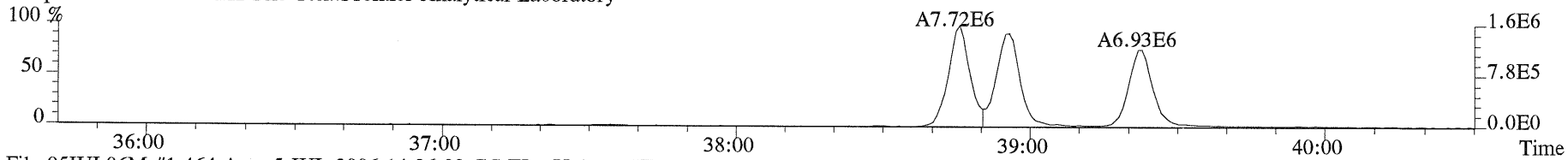
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



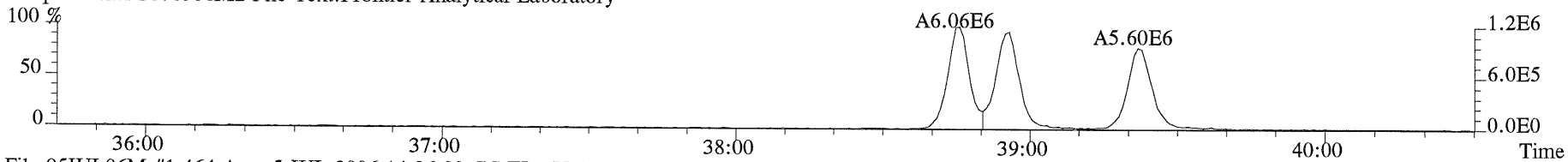
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



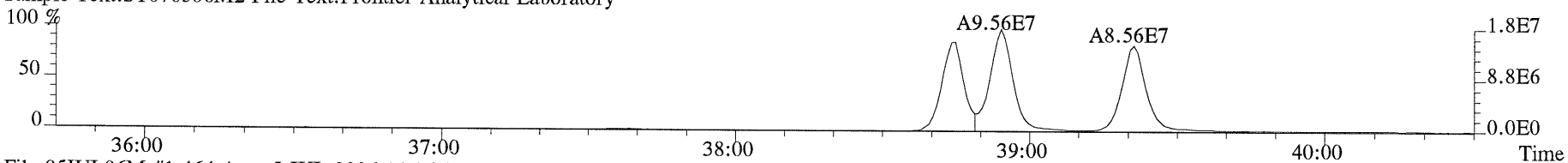
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



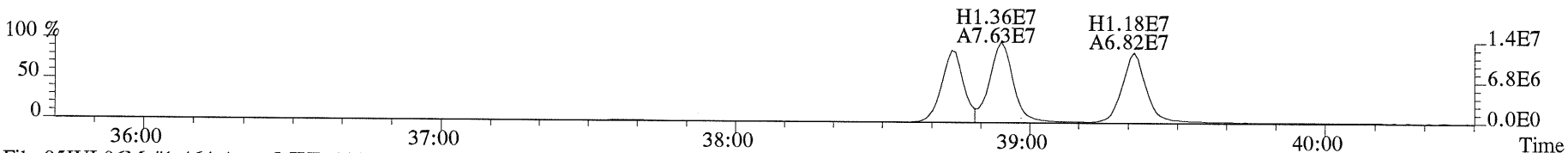
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



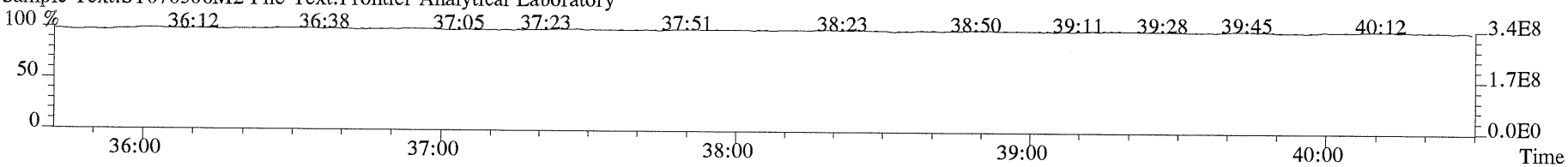
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



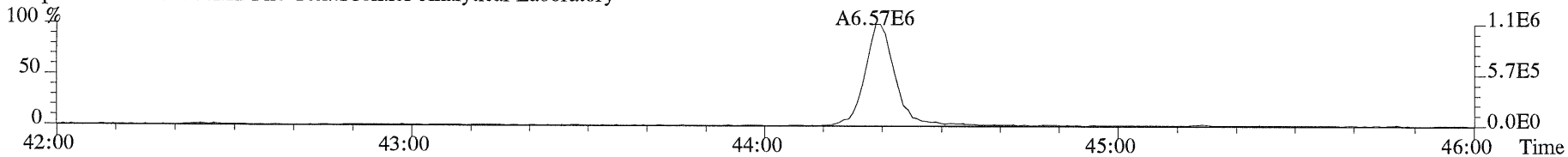
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



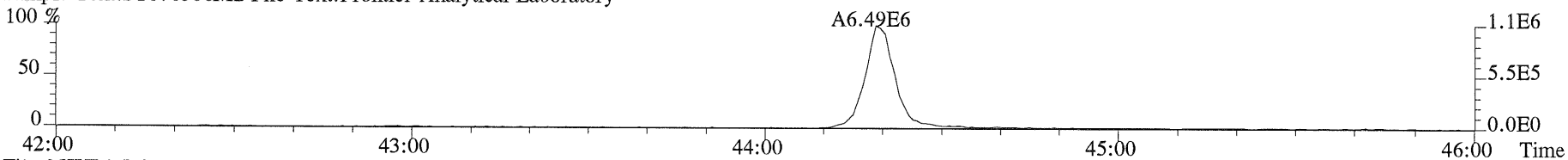
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



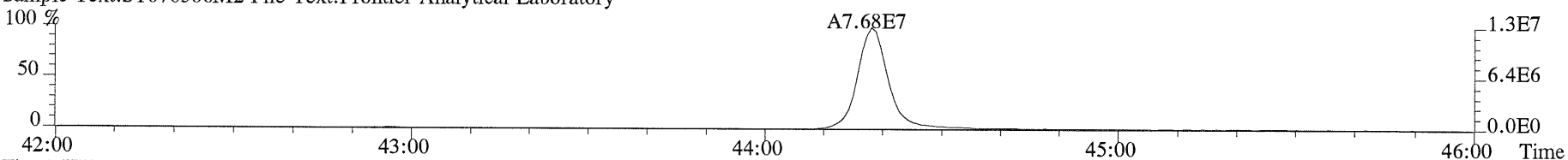
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



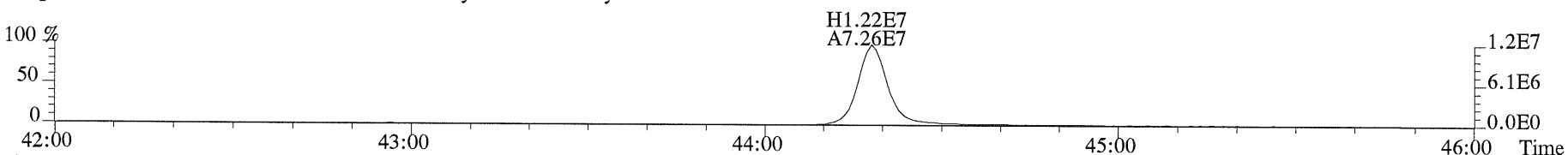
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



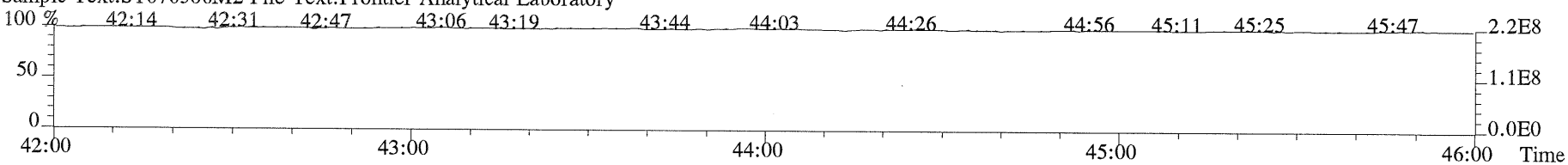
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

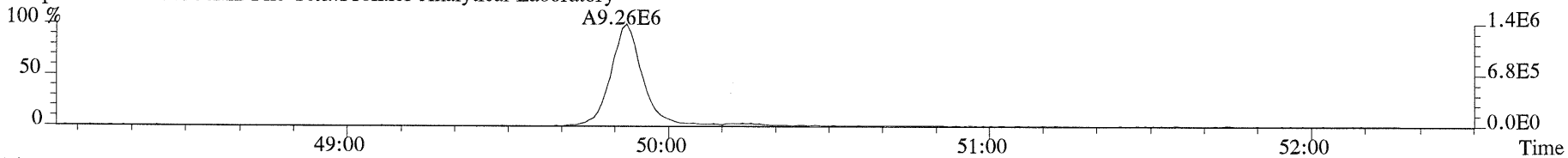


File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

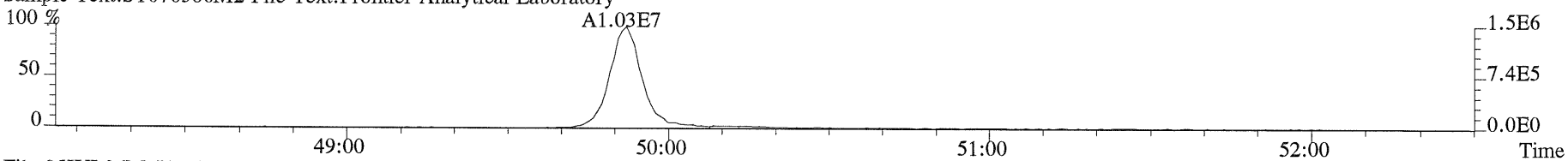


Klamath River Sediment Study

File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

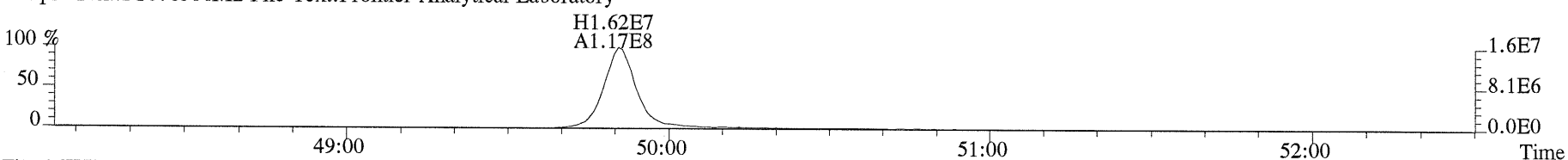


File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

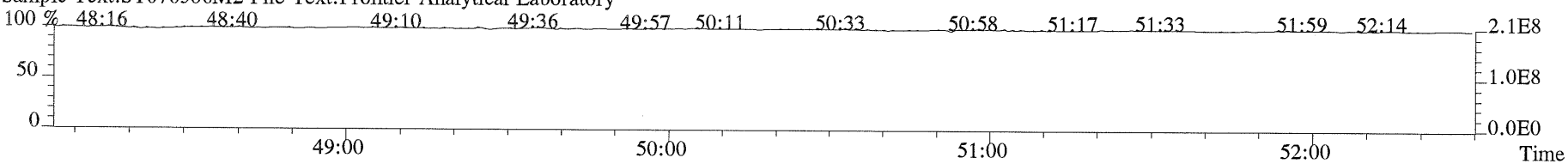


File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

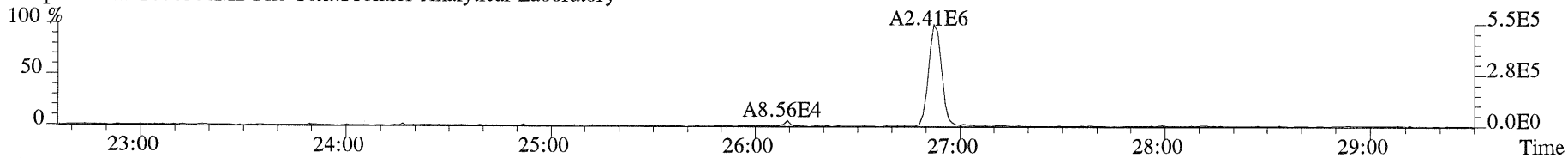
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



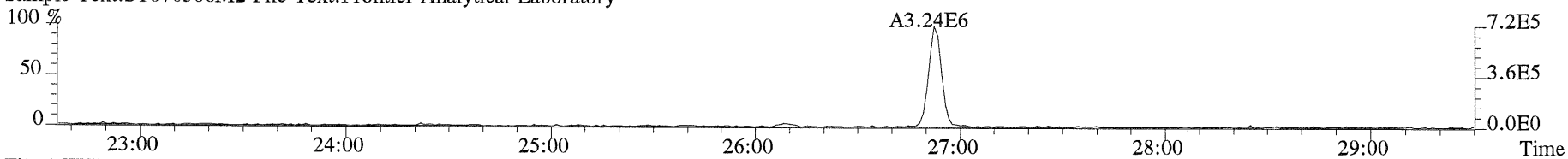
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



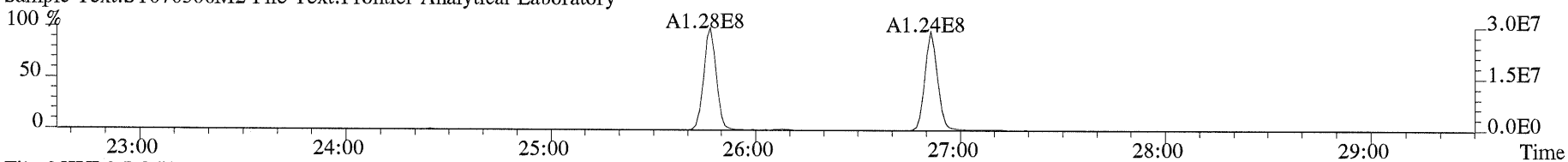
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



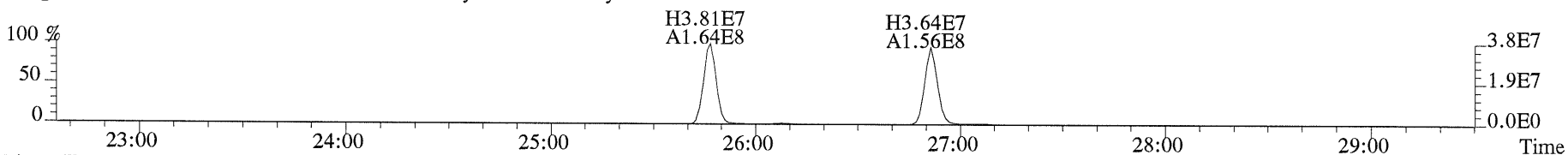
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



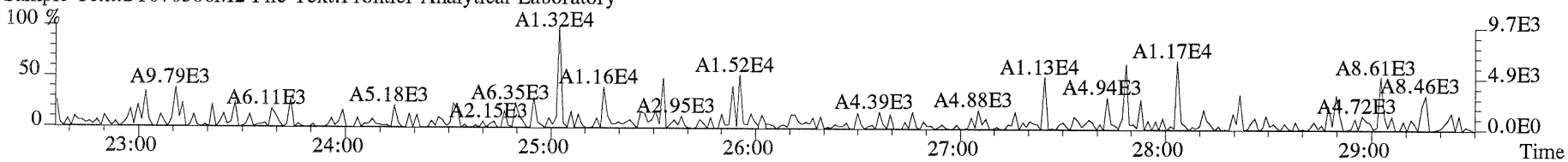
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



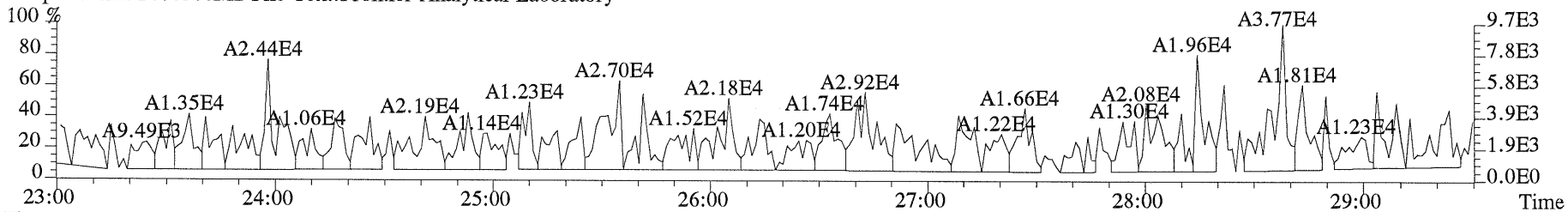
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



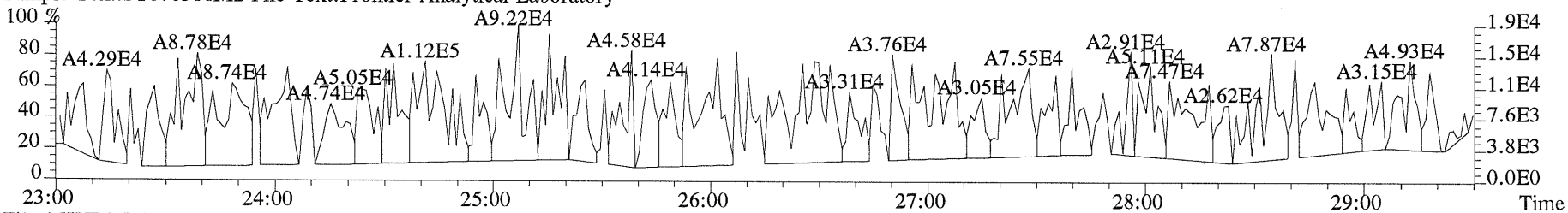
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



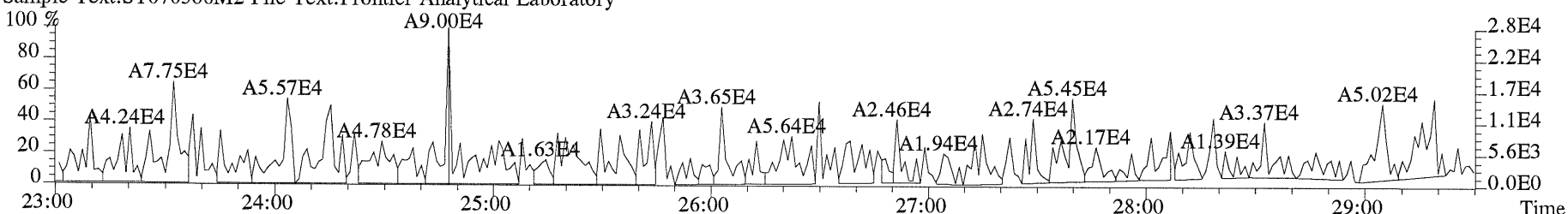
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



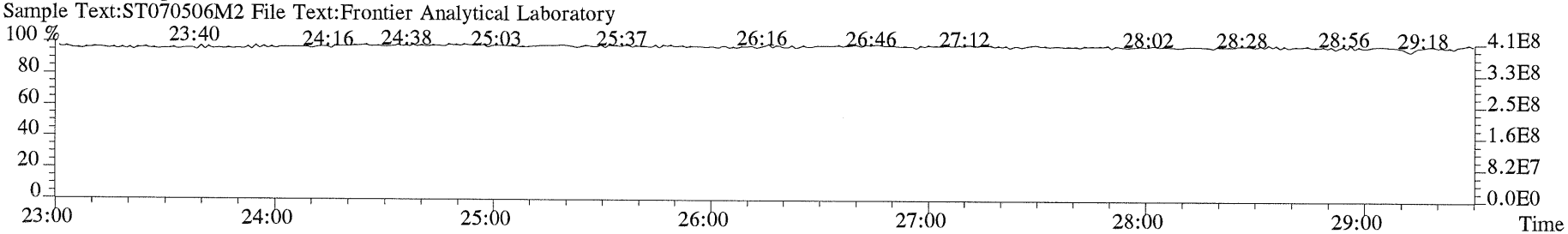
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



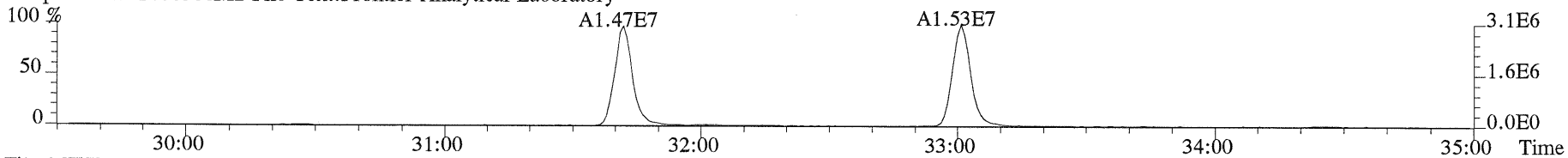
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



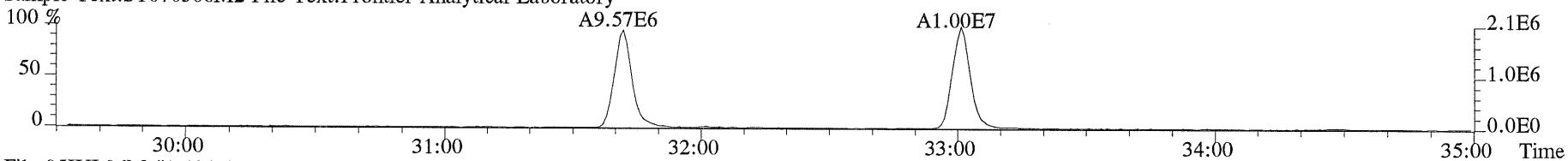
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



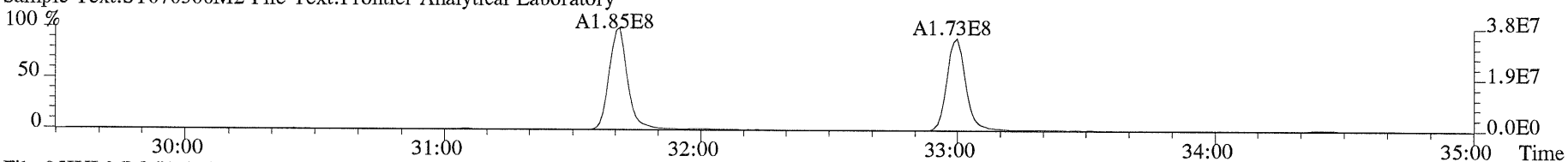
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



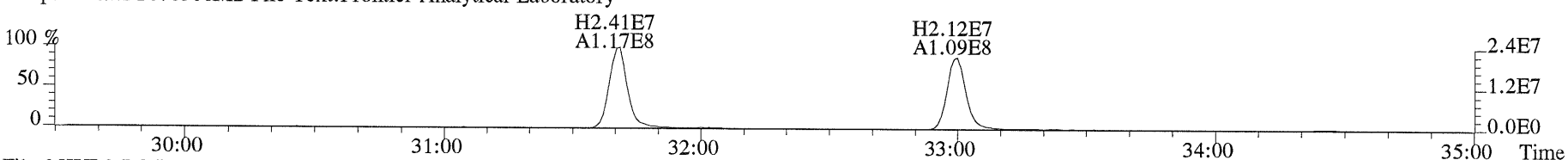
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



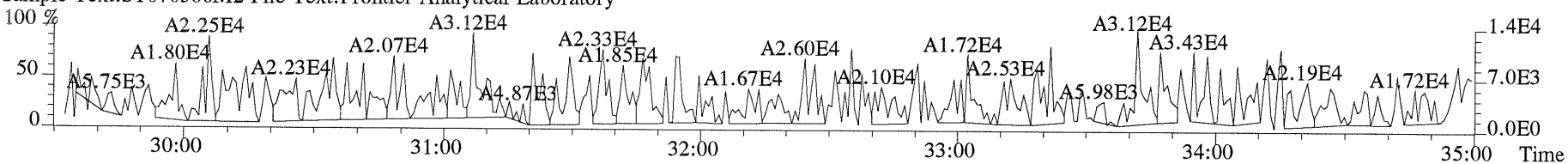
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



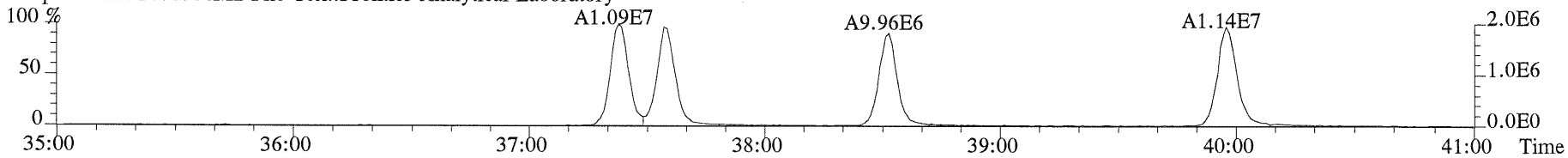
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



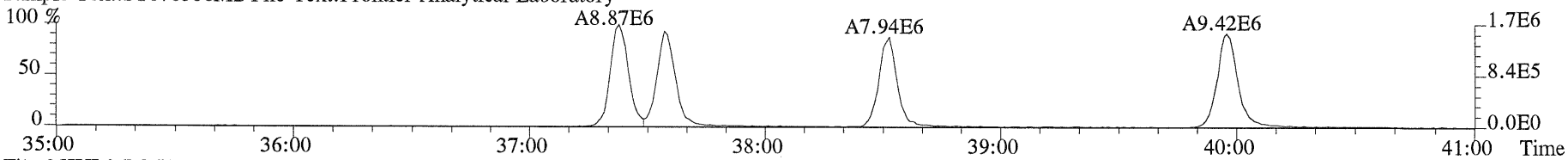
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



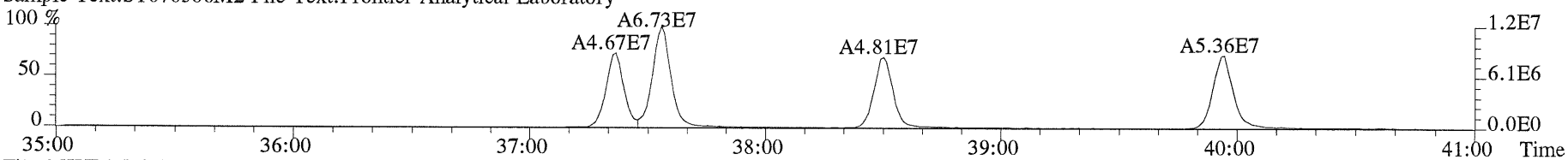
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



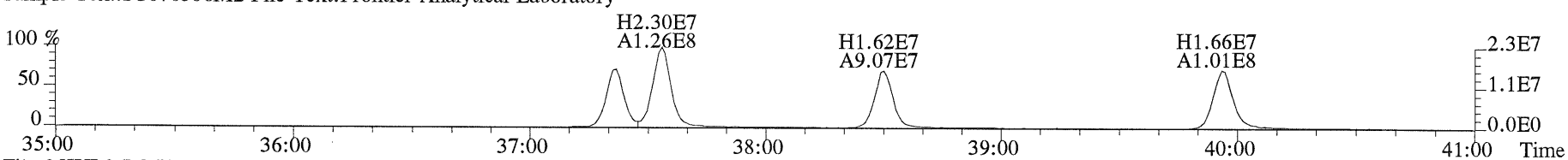
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



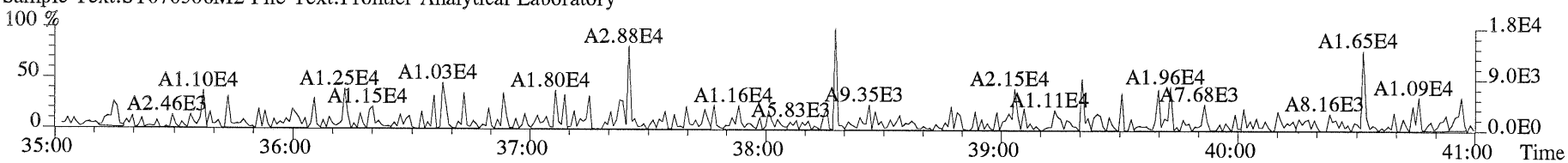
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



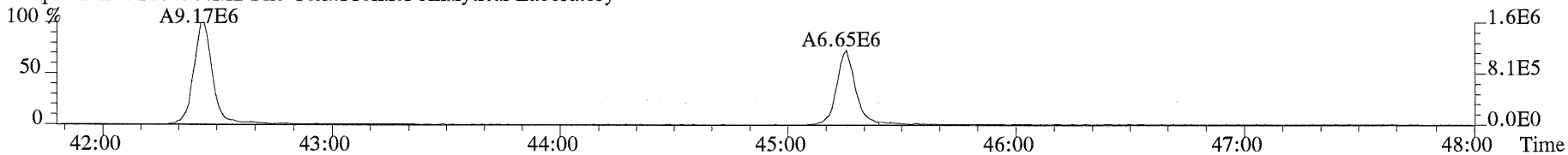
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



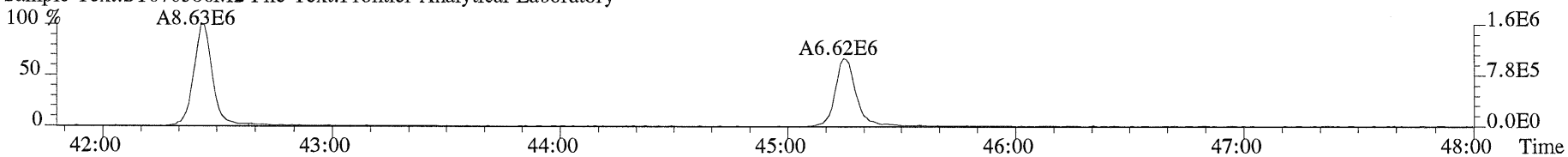
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



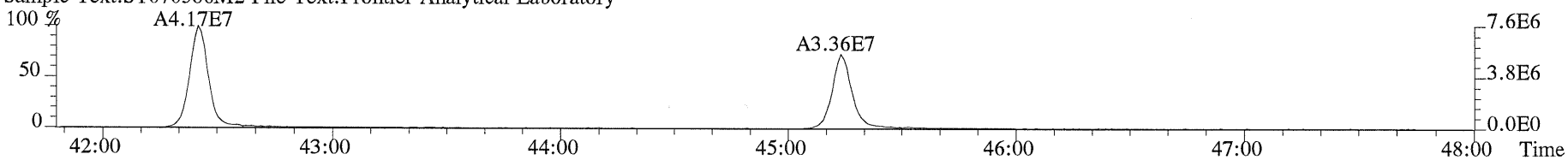
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



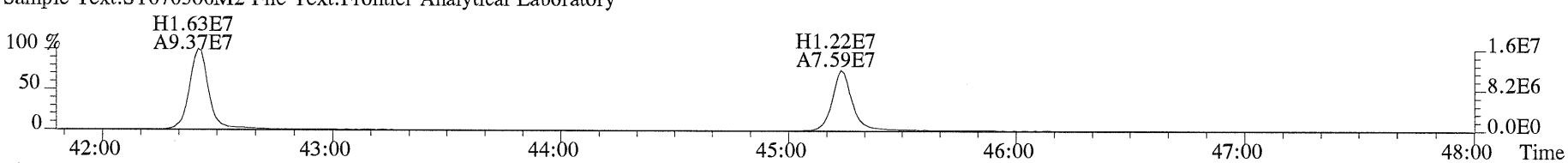
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



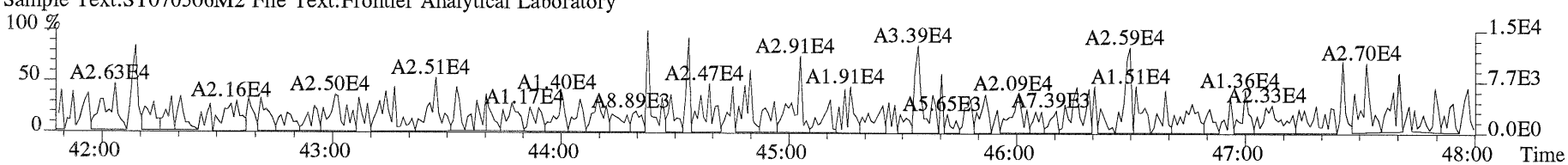
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

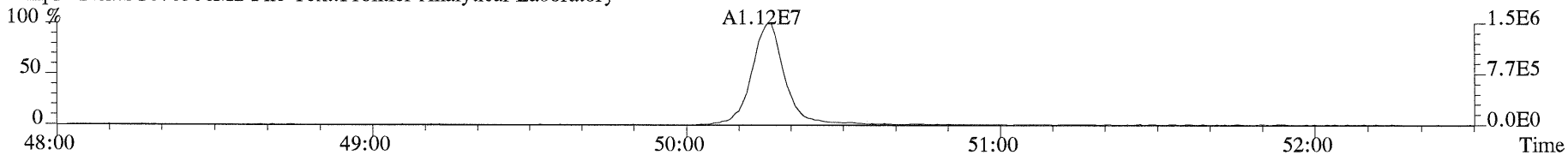


File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

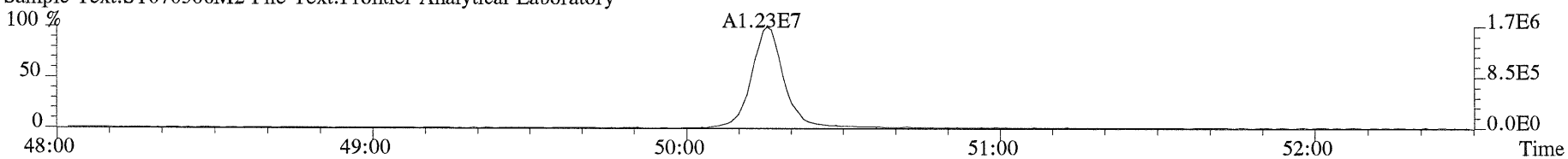


Klamath River Sediment Study

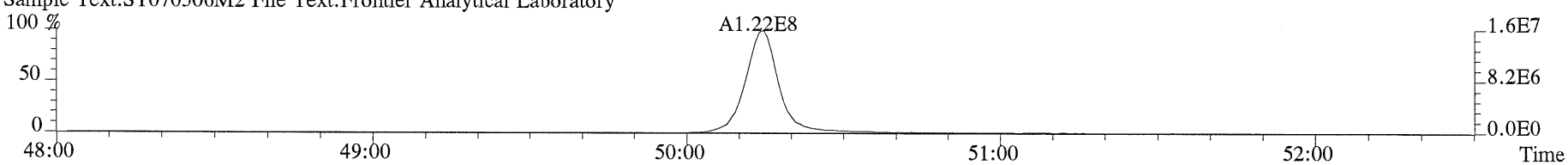
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



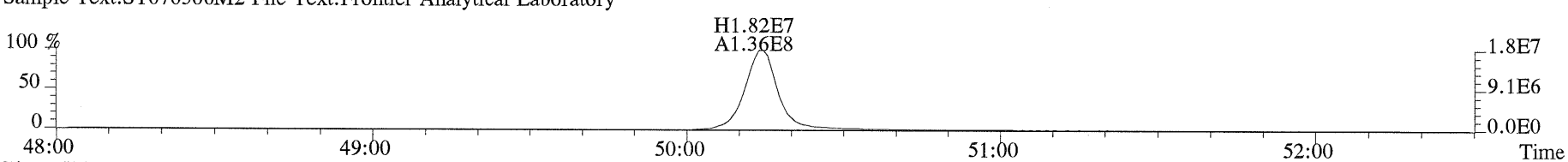
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



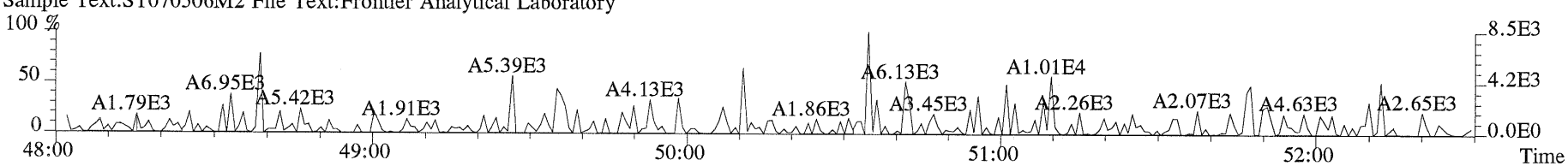
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



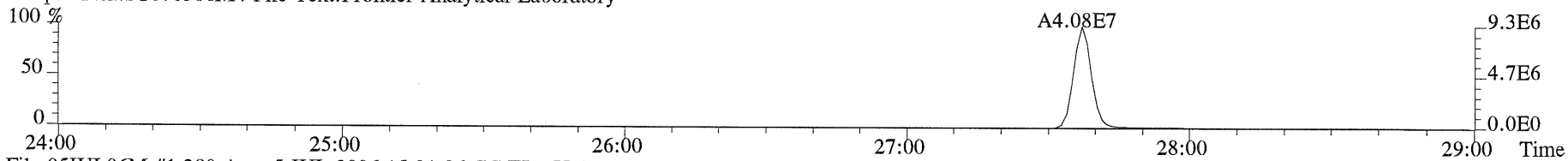
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



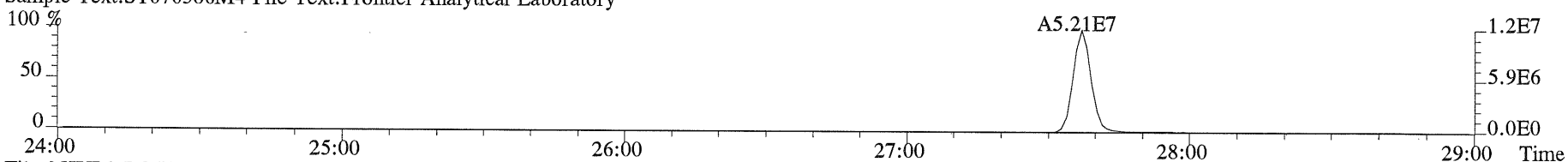
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



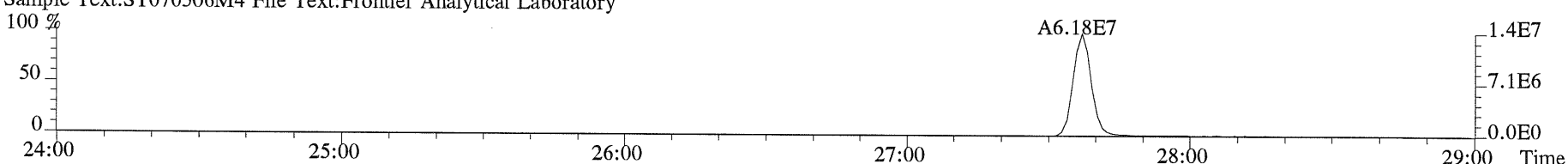
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



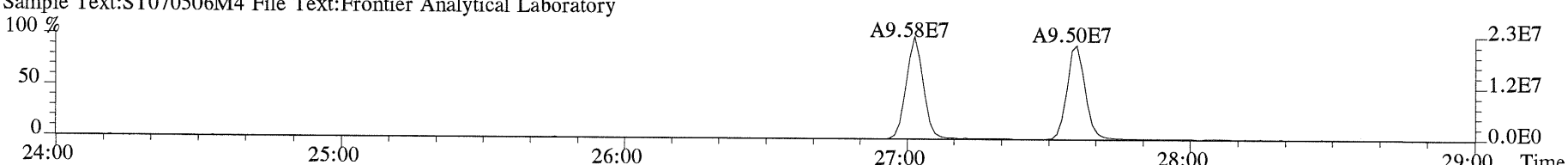
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



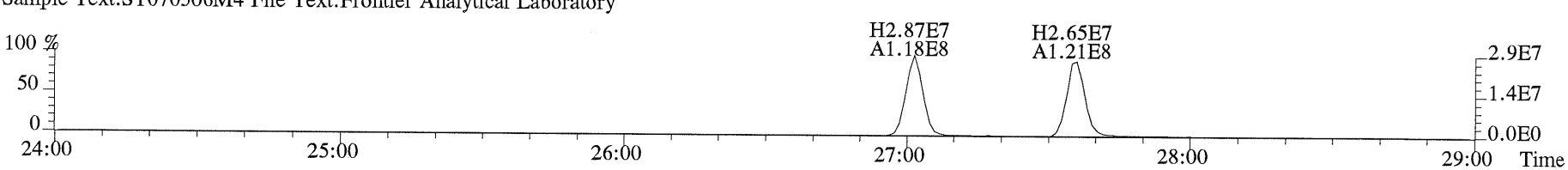
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



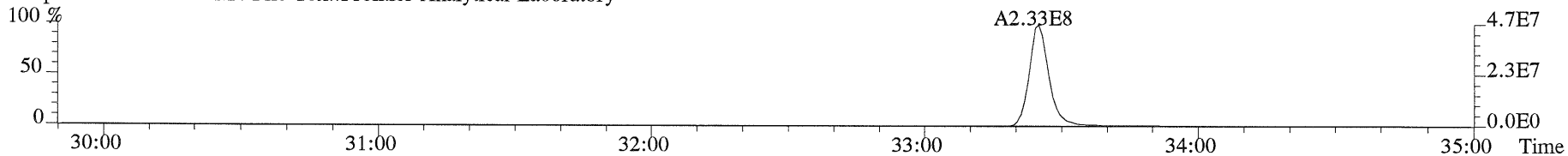
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



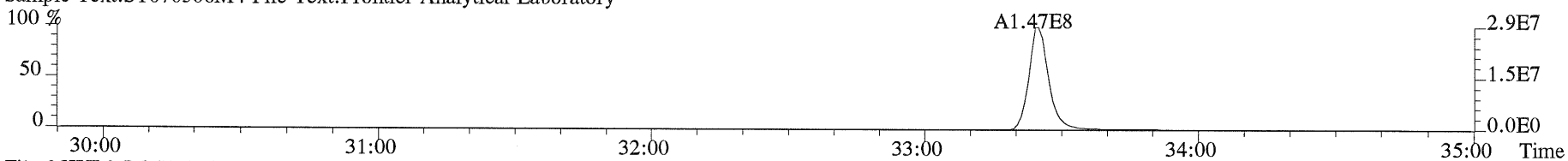
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



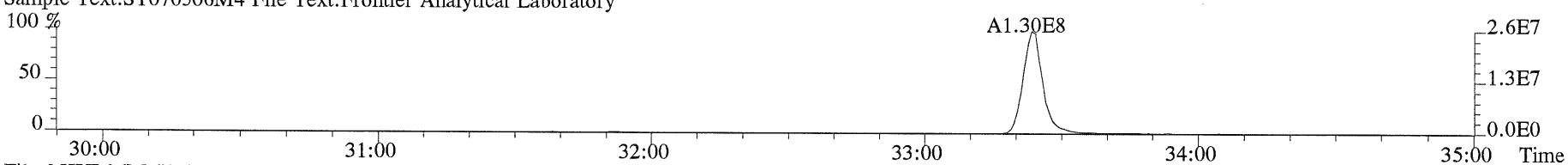
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



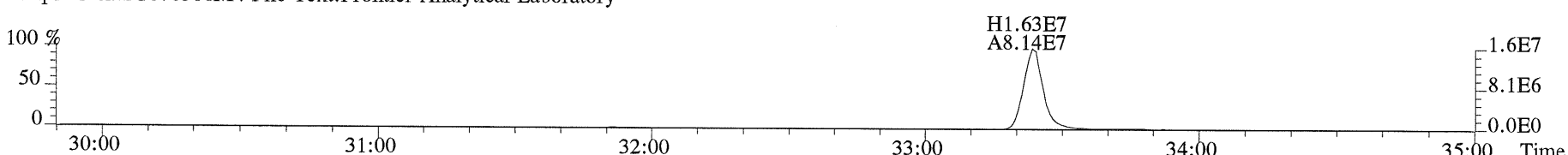
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



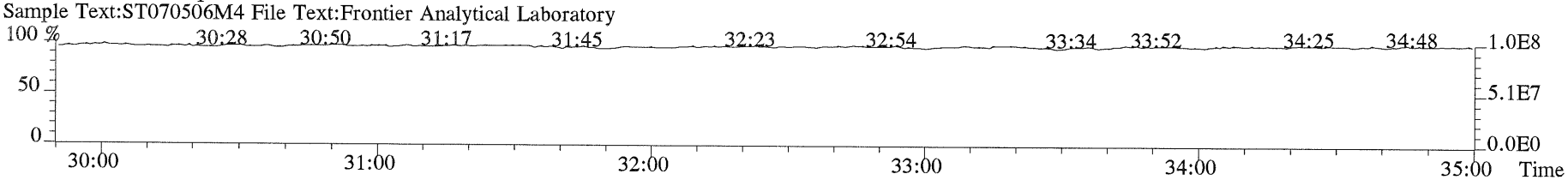
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



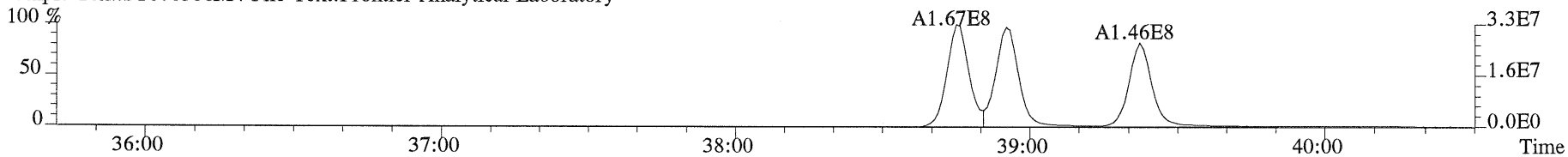
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



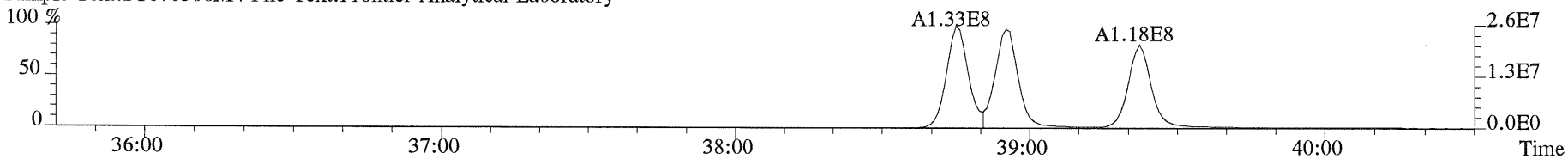
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



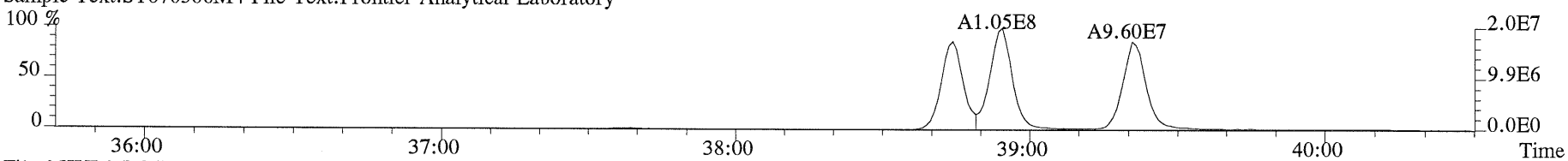
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



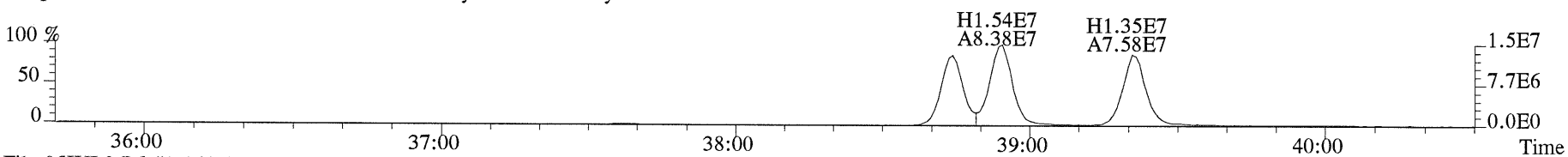
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



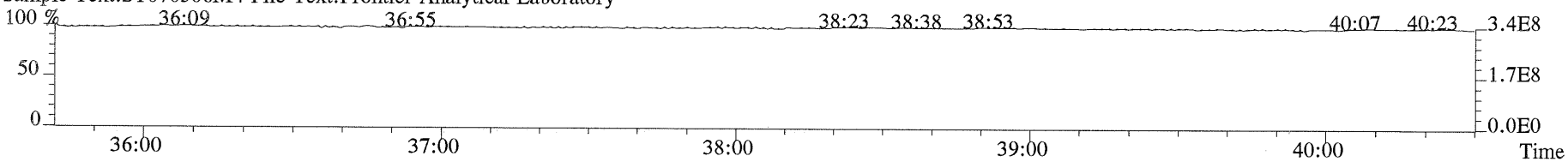
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



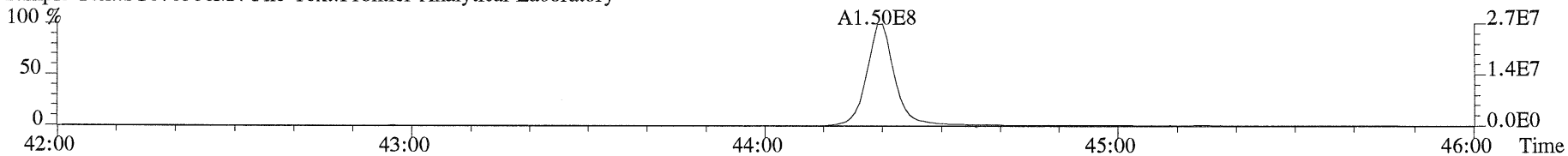
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



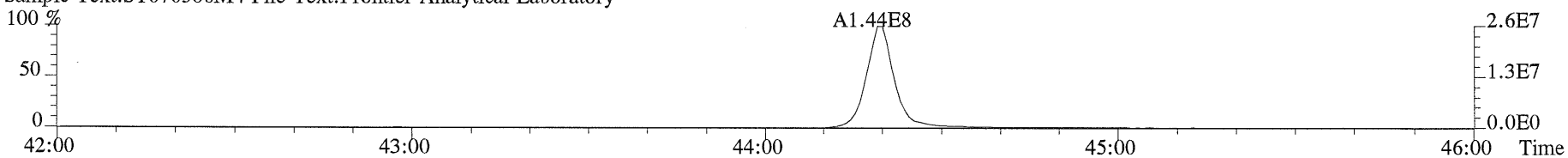
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



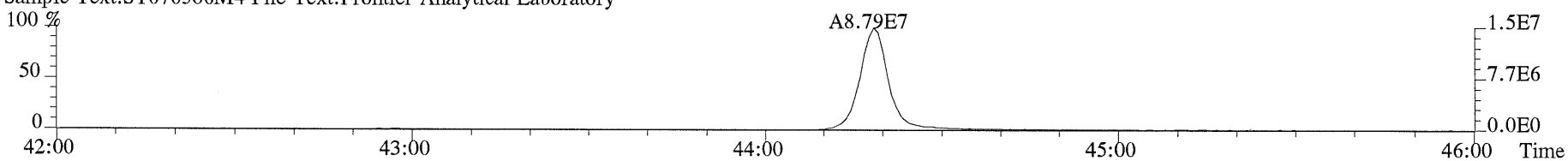
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



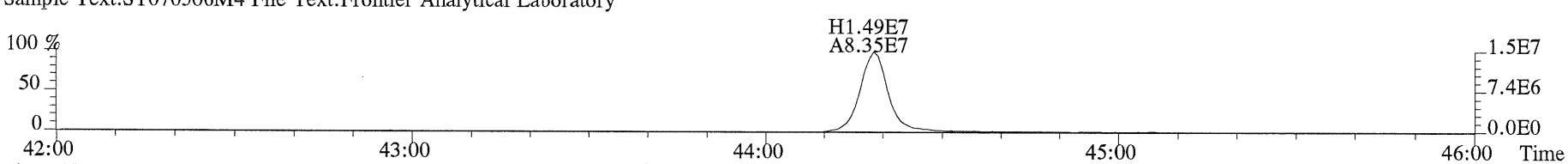
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



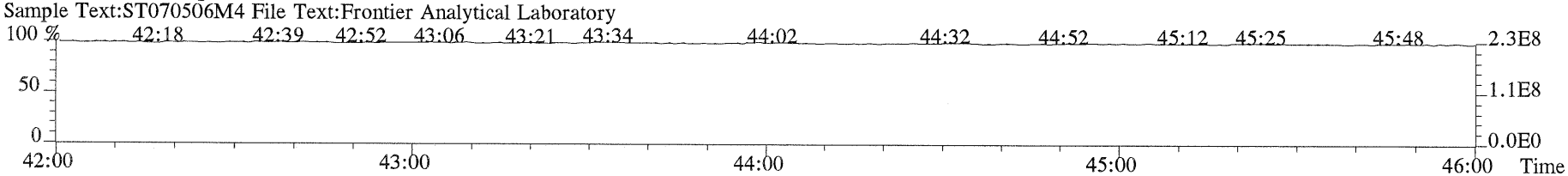
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



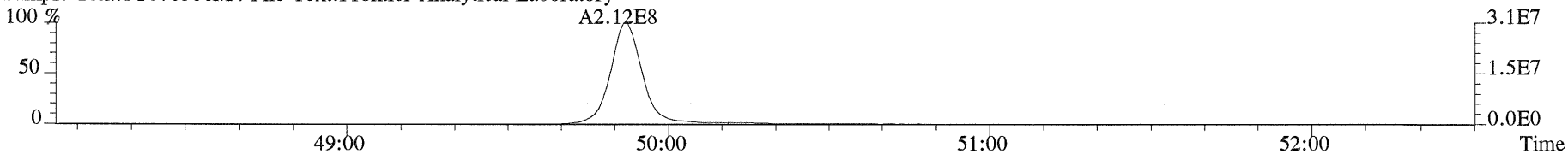
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



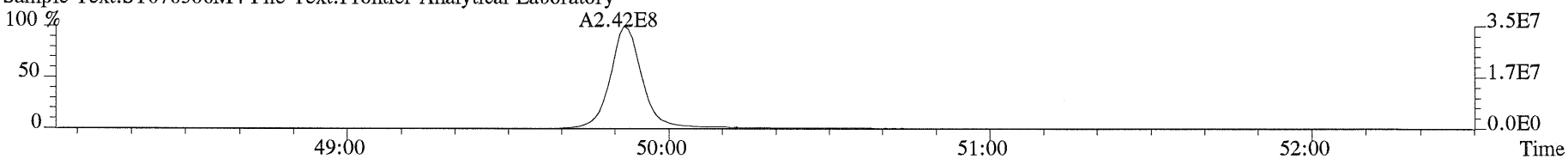
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



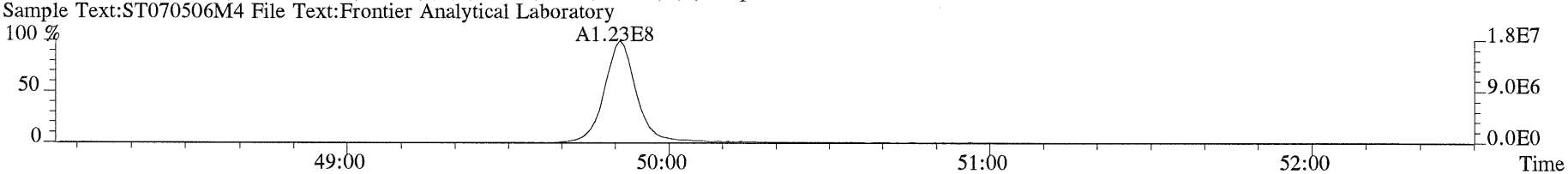
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



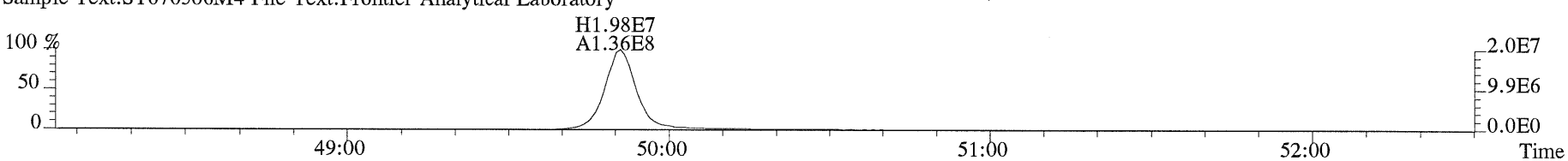
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



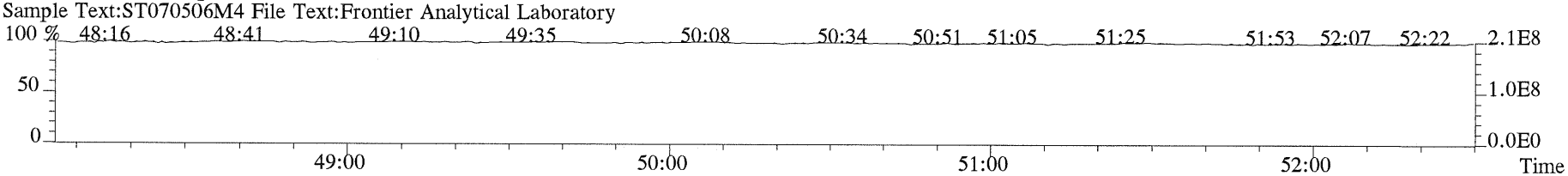
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



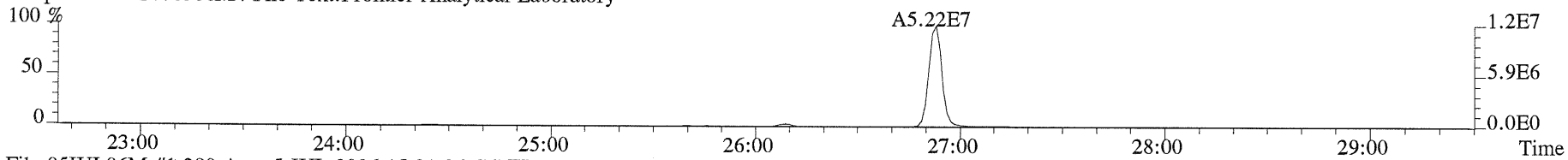
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



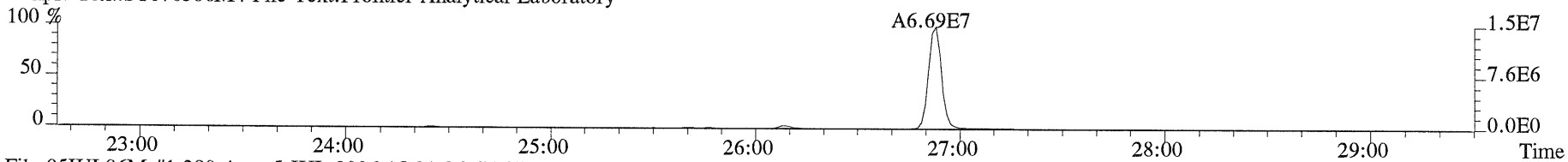
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



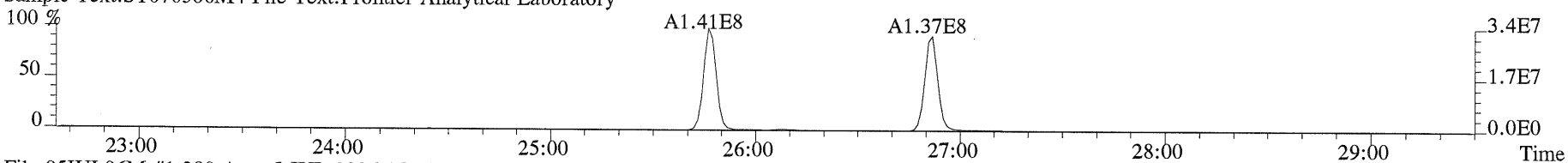
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



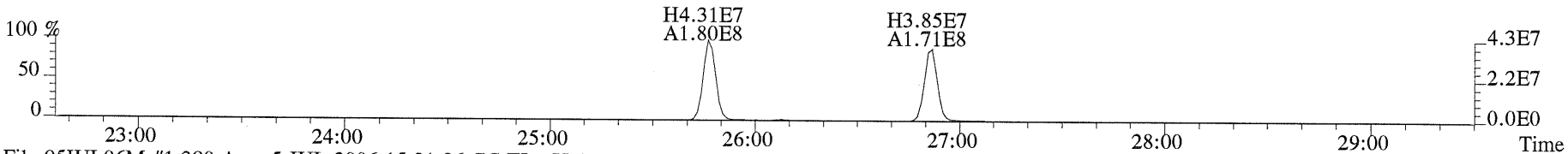
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



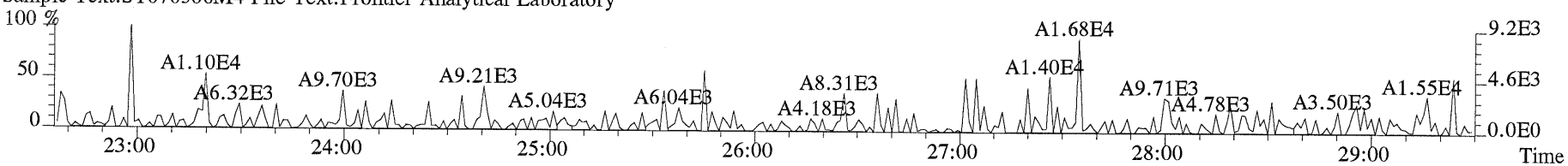
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



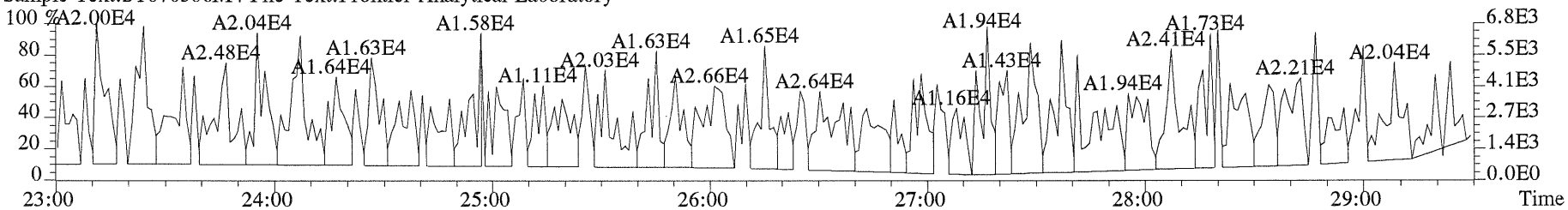
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



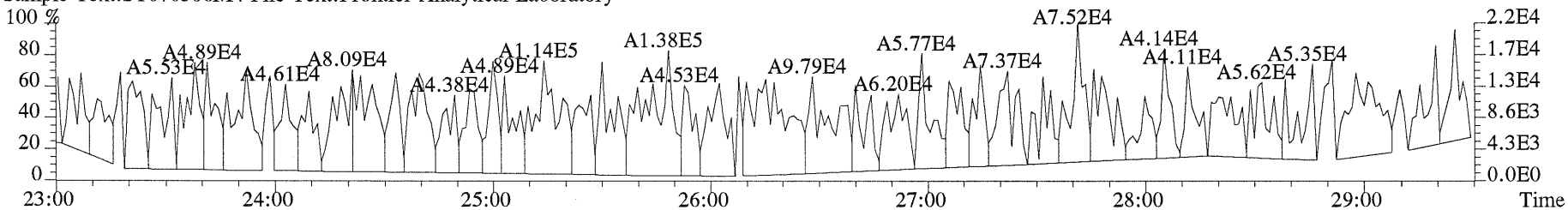
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



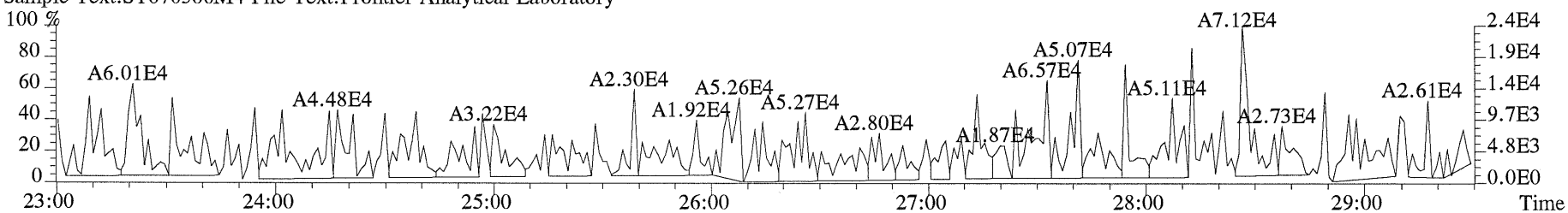
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



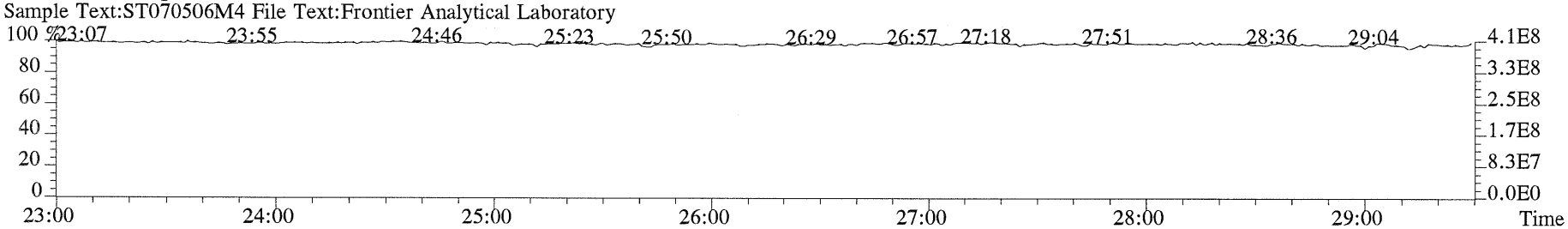
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



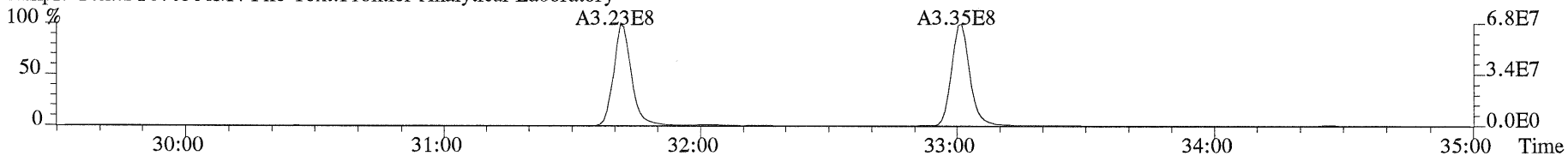
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



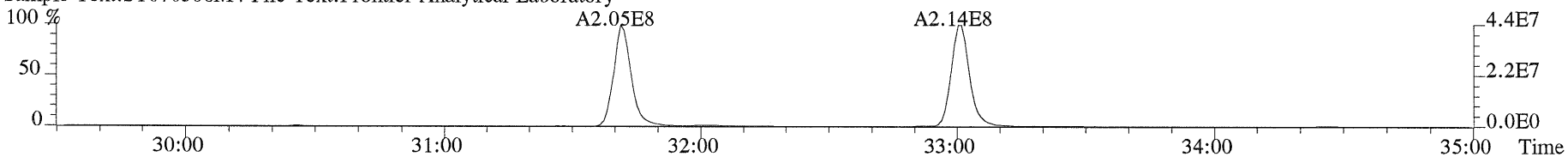
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



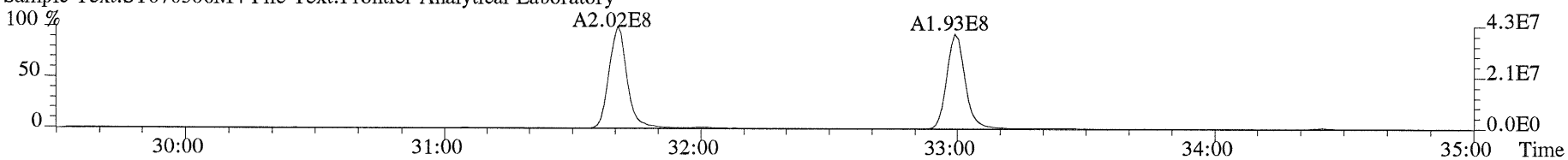
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



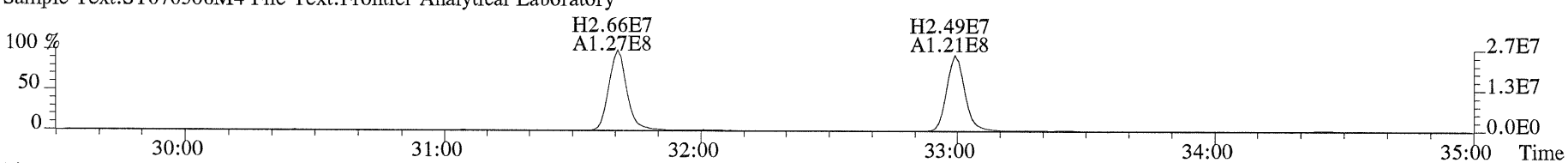
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



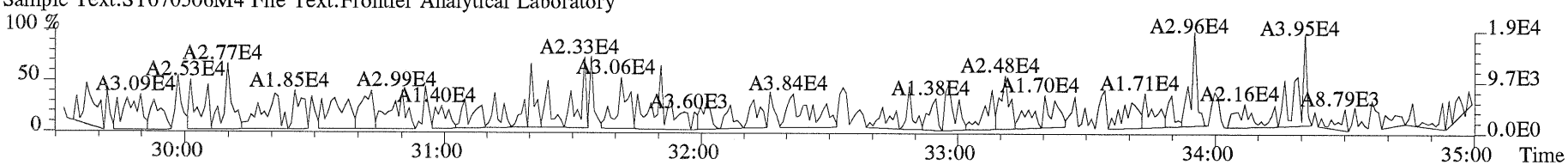
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



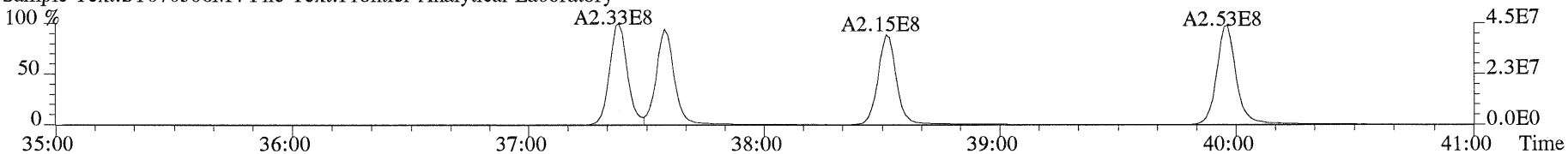
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



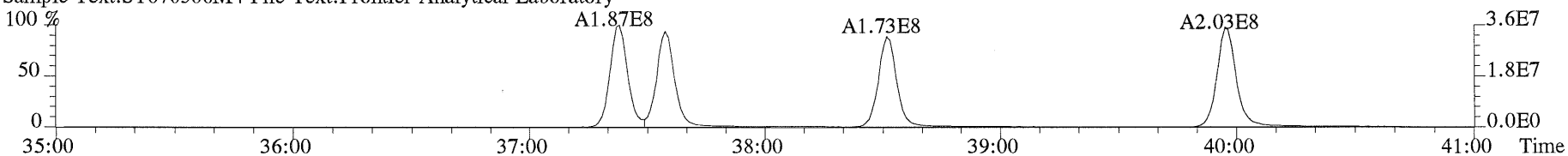
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



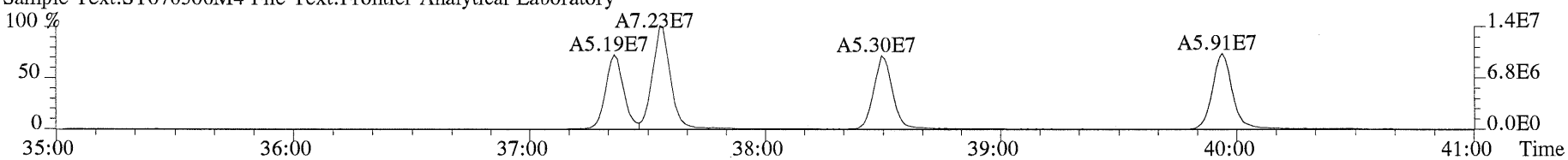
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



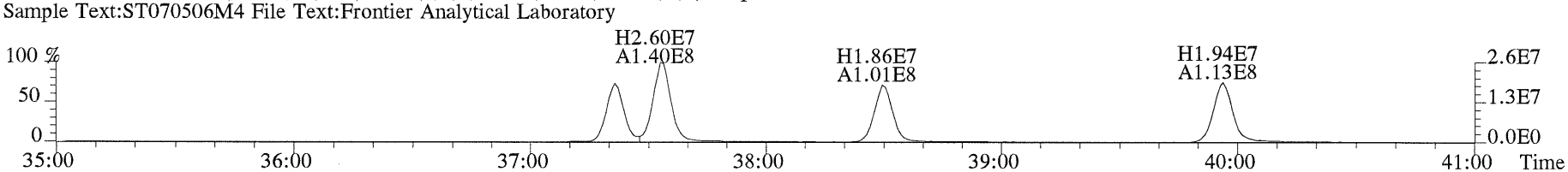
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



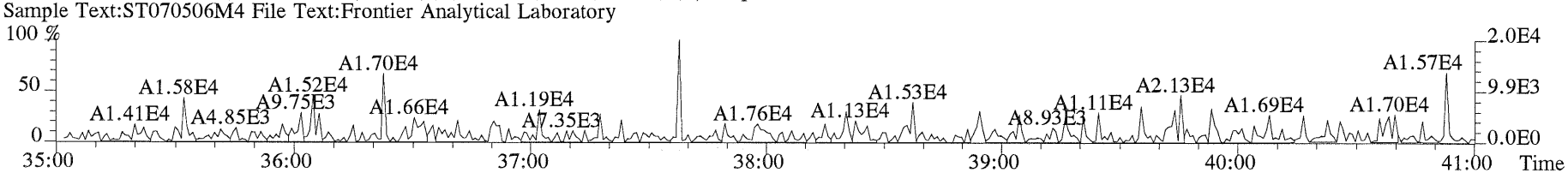
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



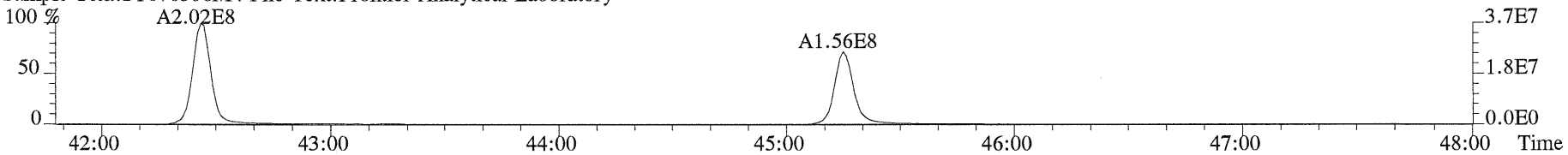
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



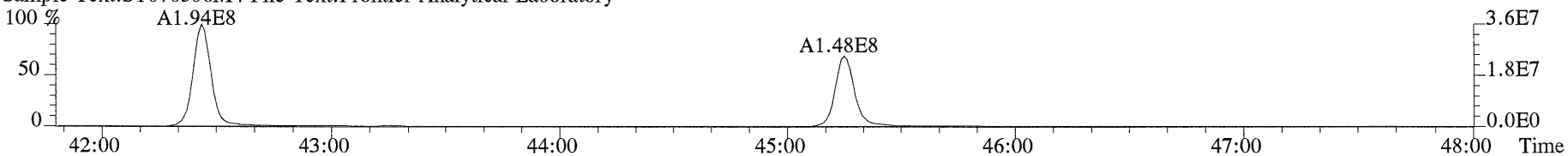
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



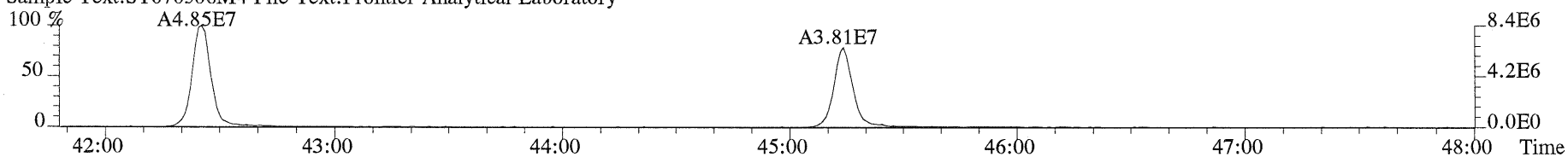
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



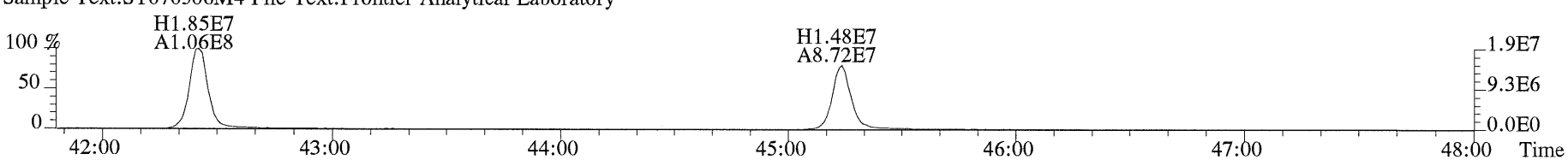
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



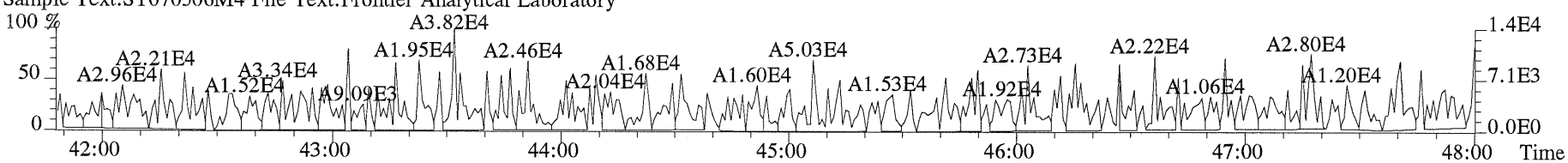
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



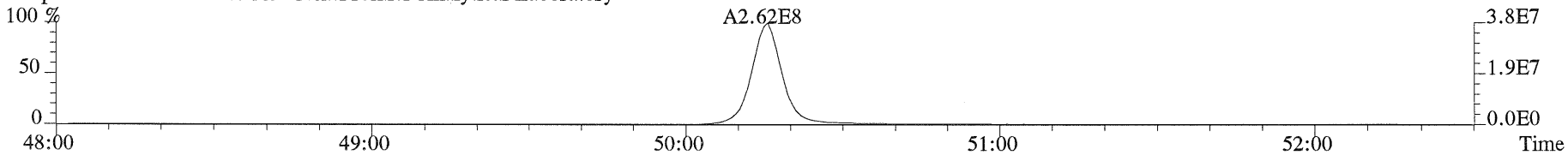
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



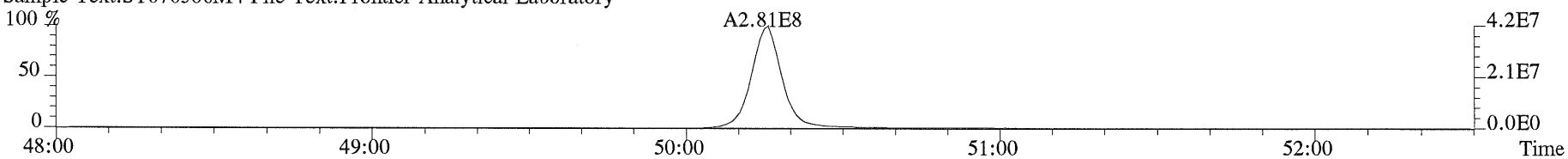
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



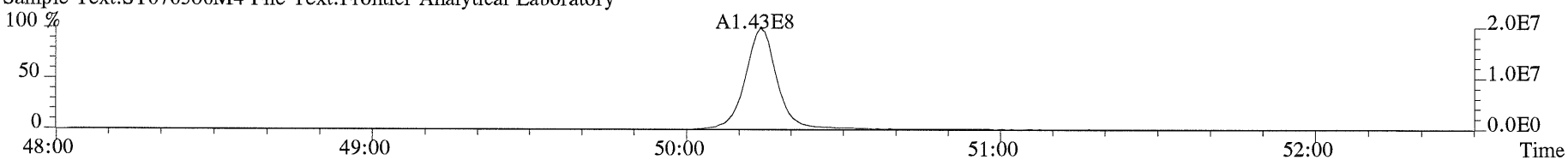
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



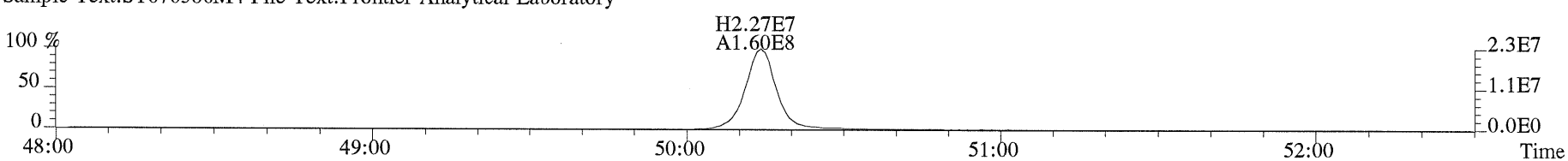
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



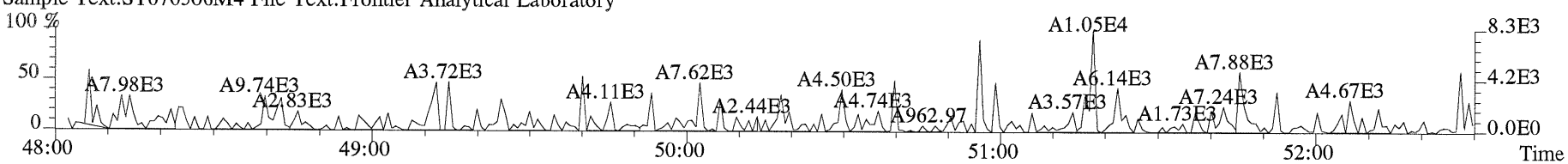
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



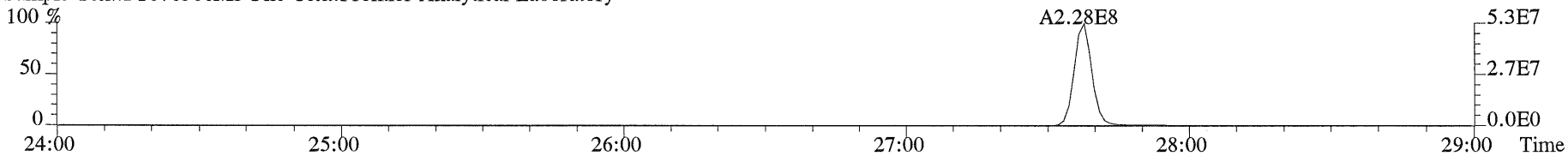
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



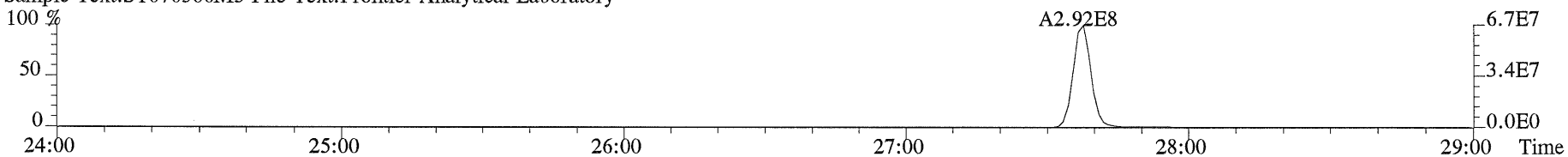
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



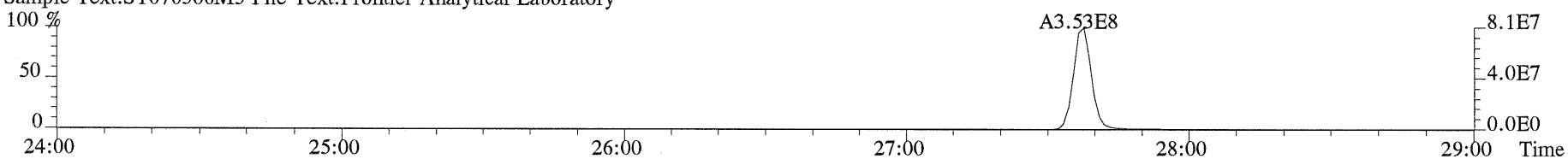
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



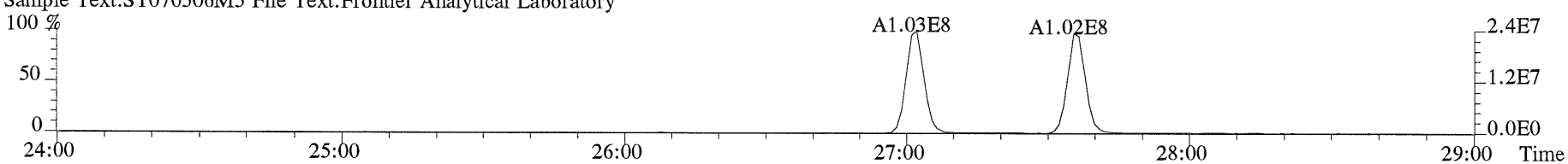
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



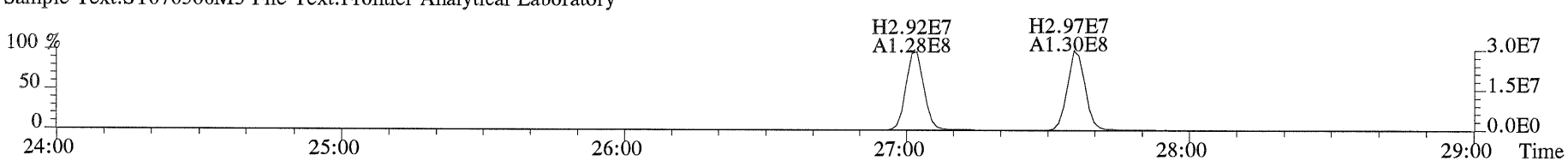
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



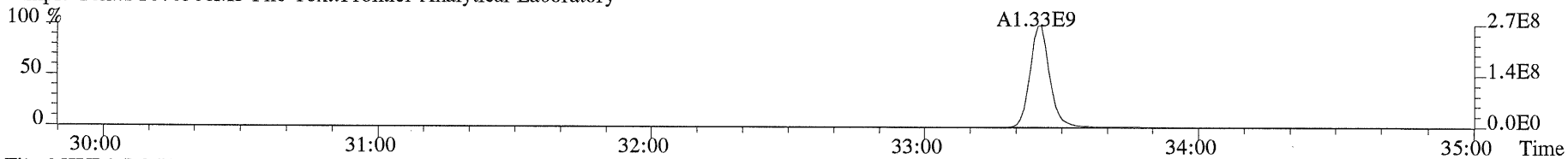
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



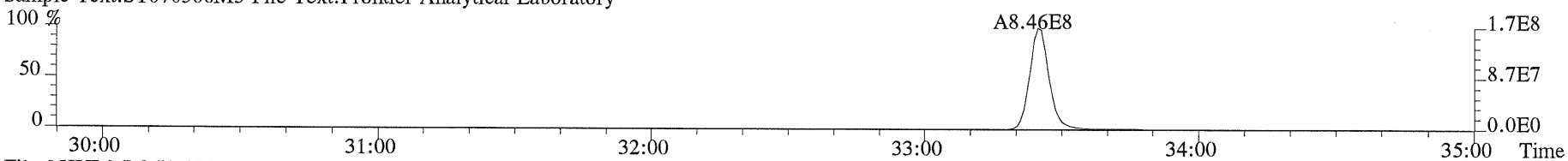
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



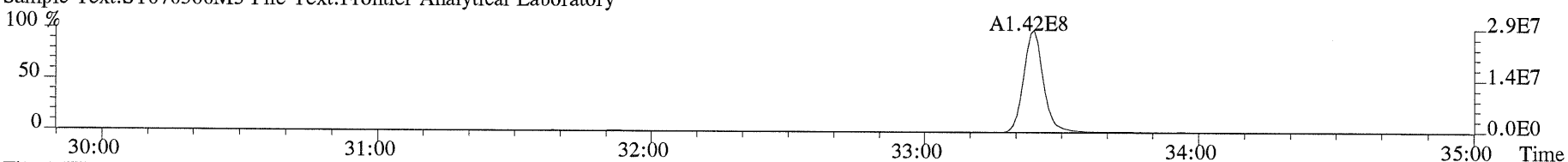
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



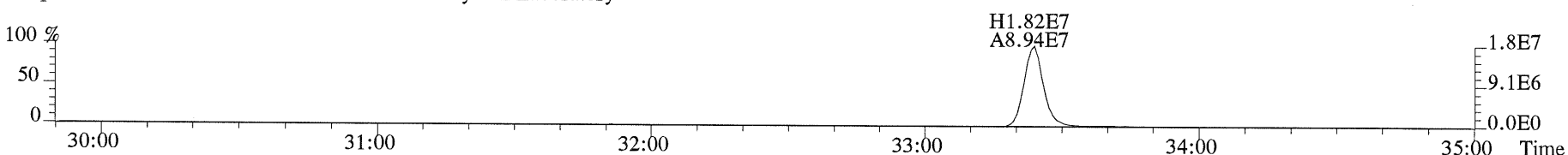
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



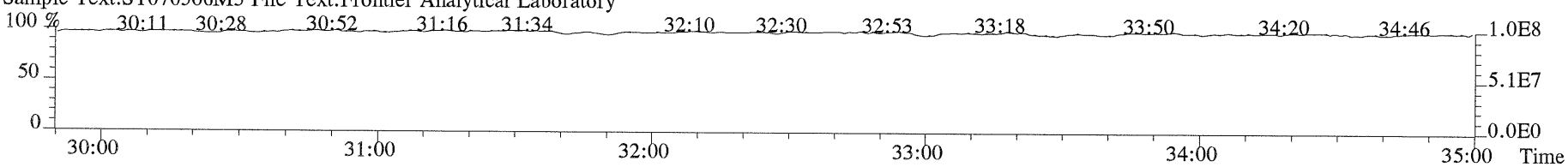
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



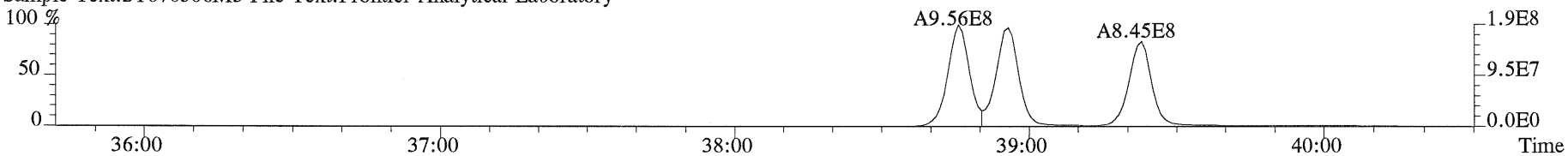
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



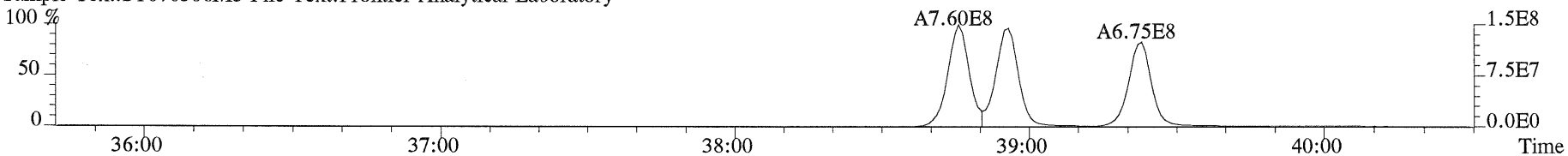
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



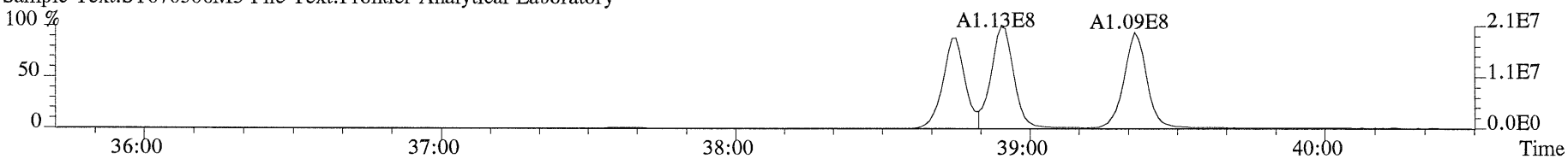
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



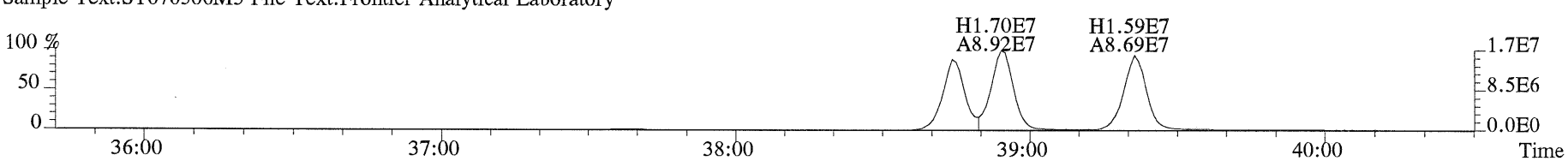
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



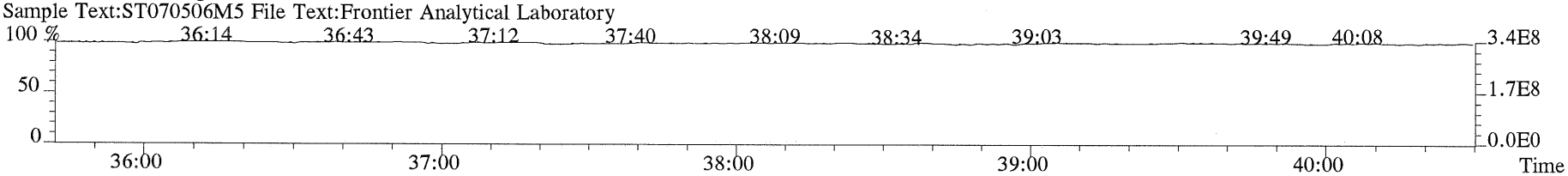
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



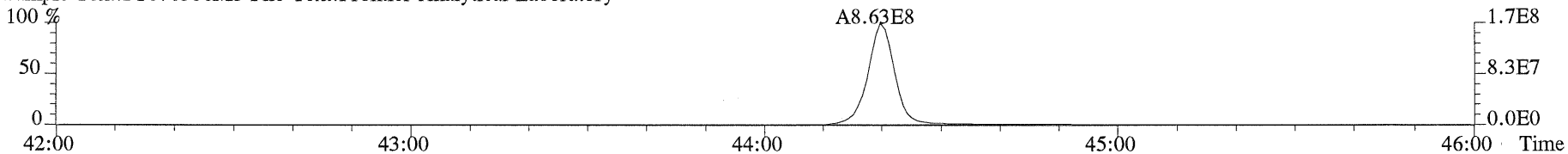
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



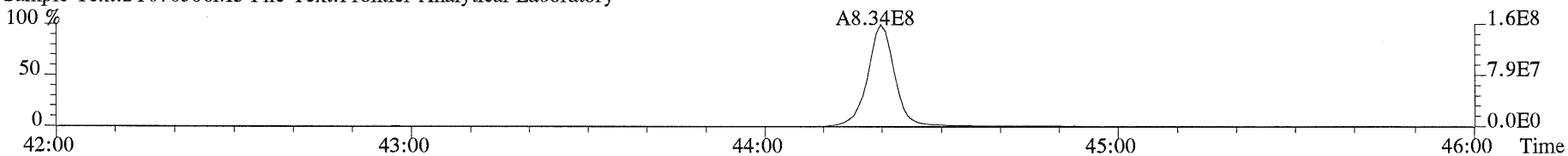
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



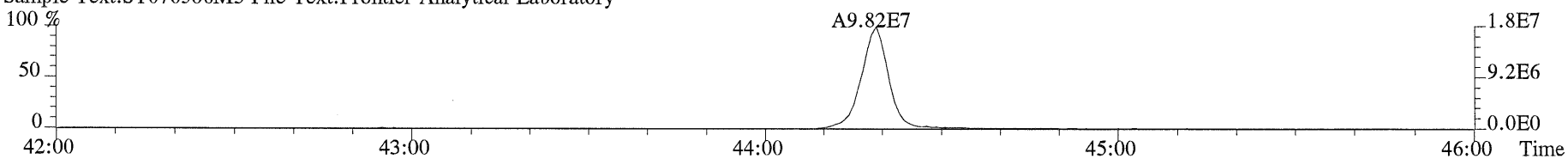
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



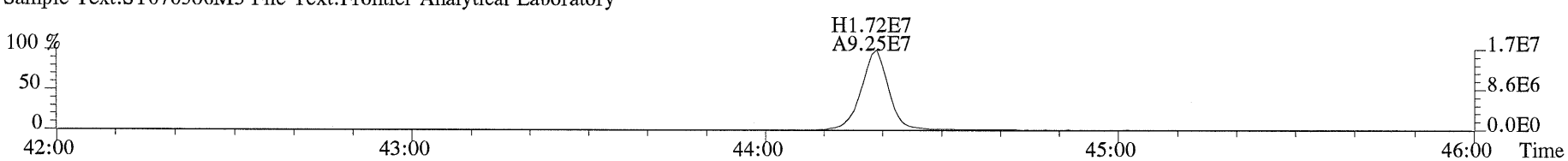
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



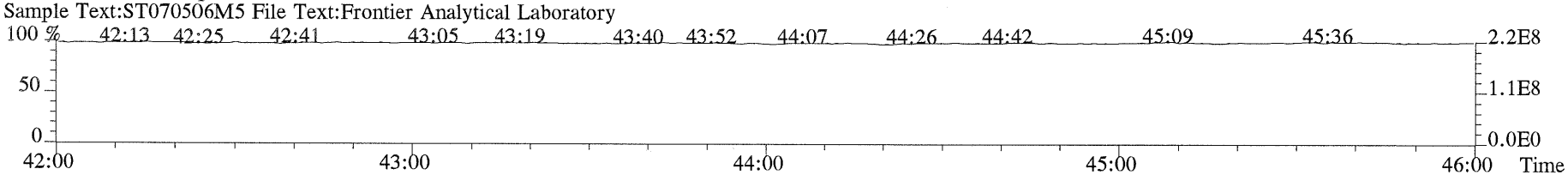
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



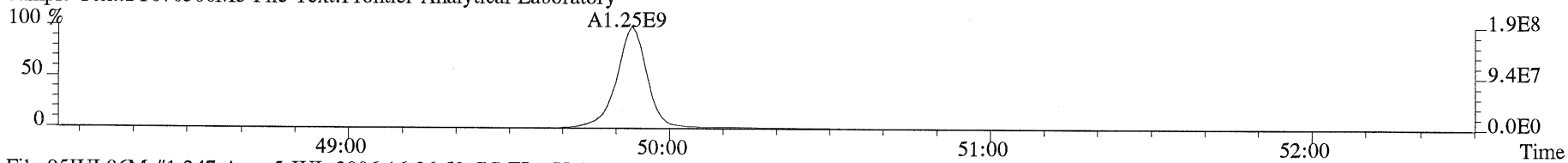
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



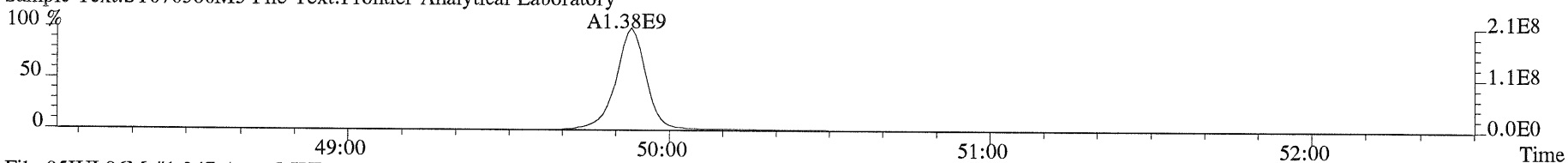
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



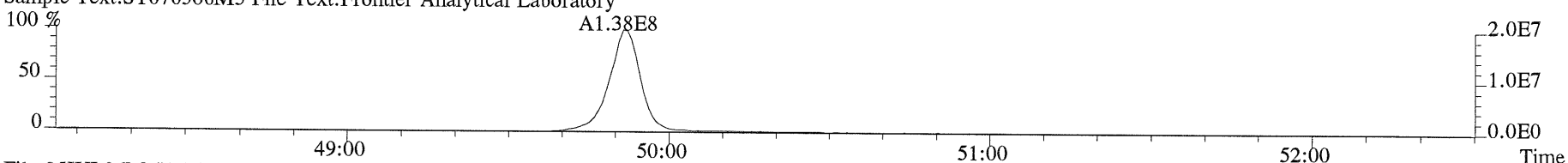
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



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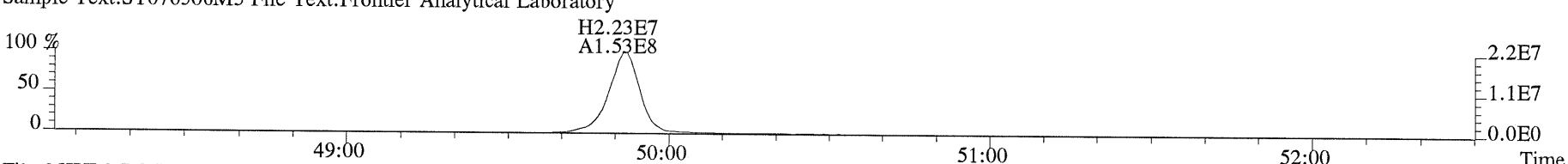
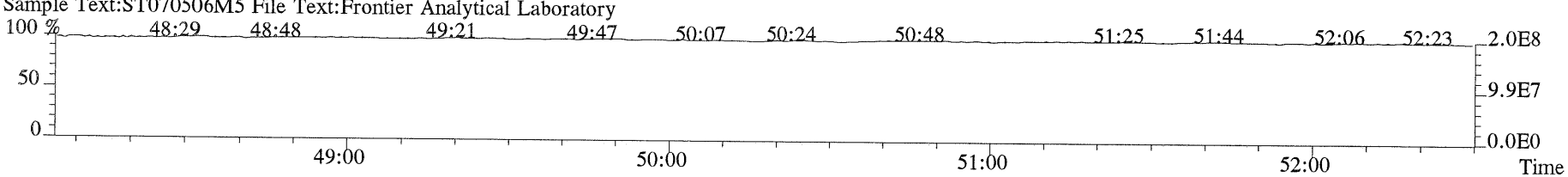
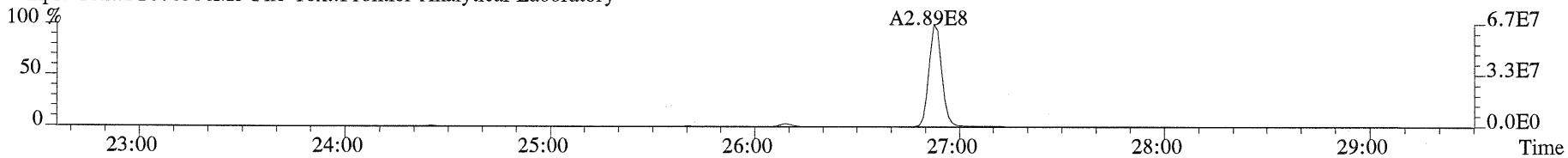
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



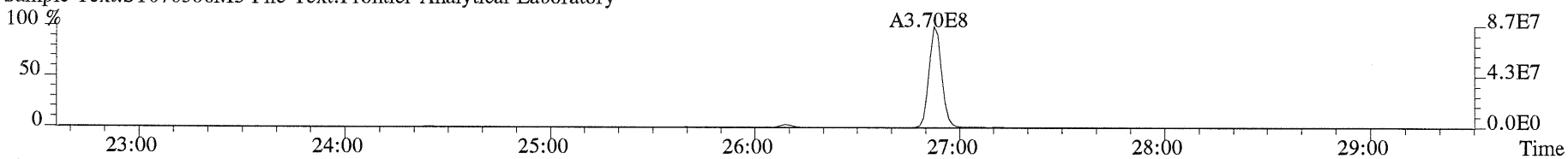
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



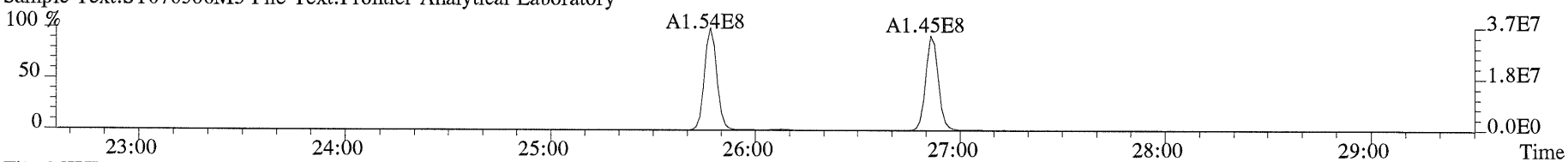
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



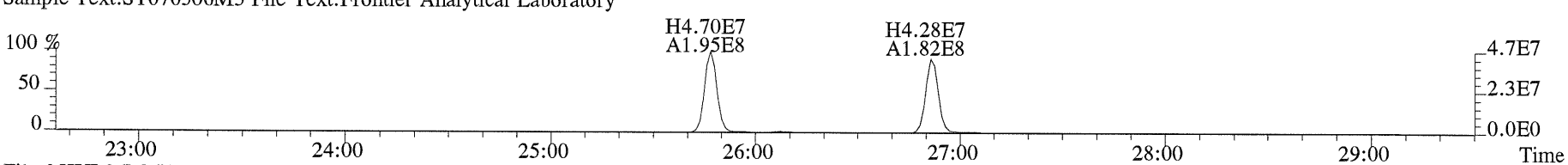
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



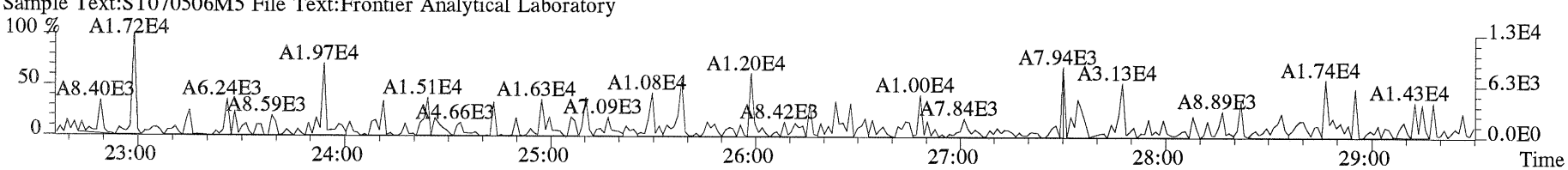
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



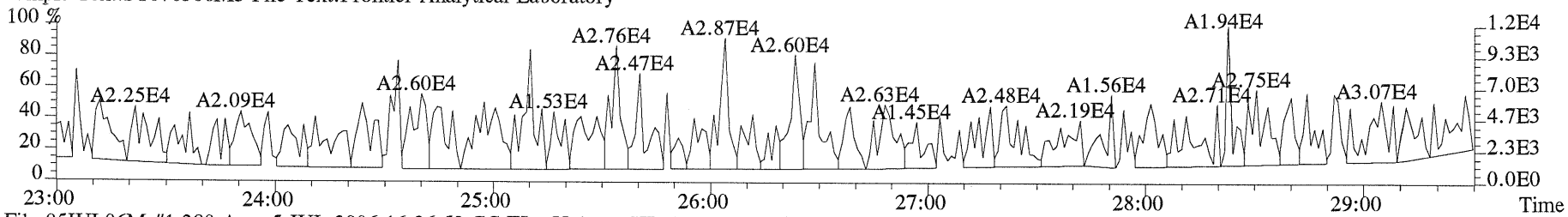
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



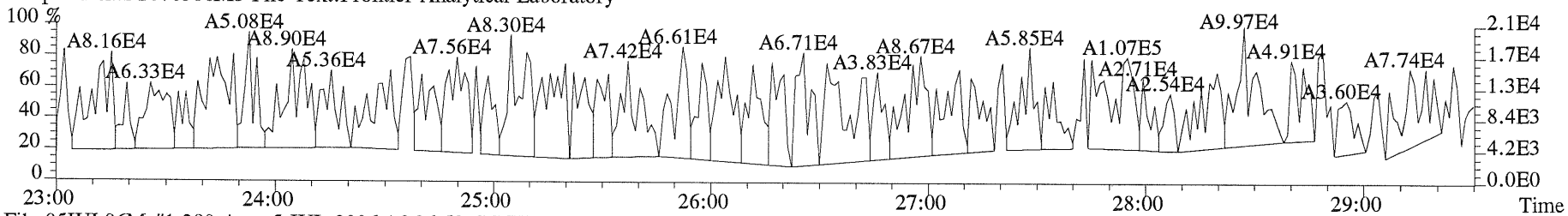
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



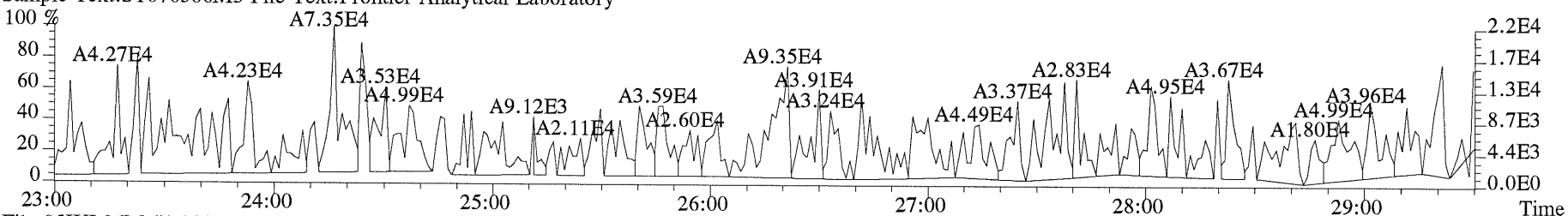
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



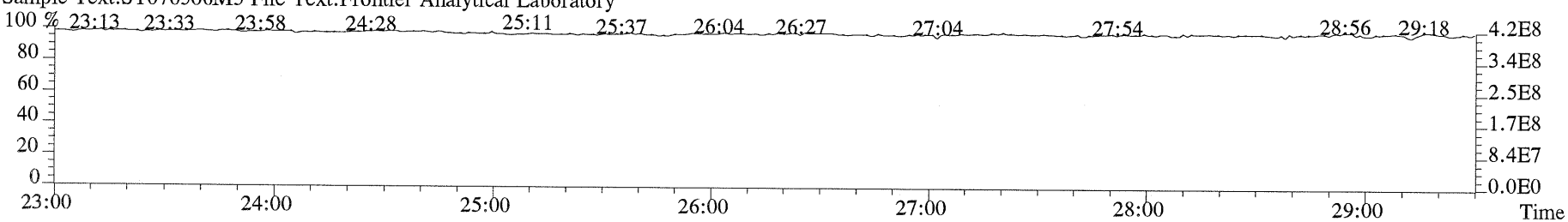
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



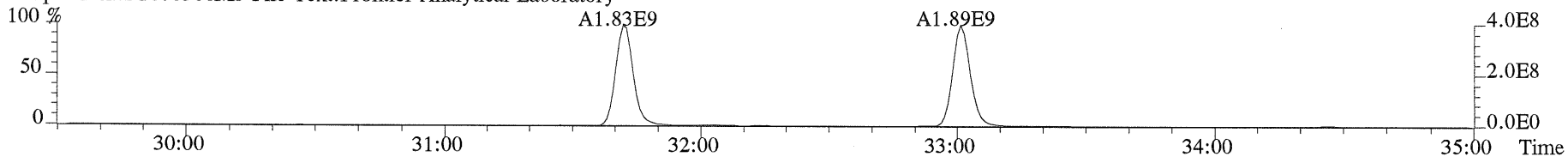
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



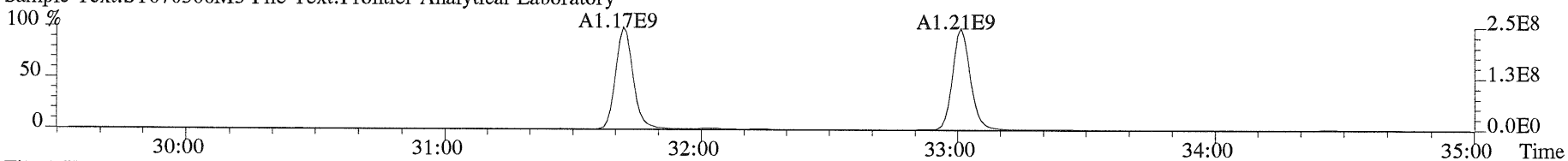
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



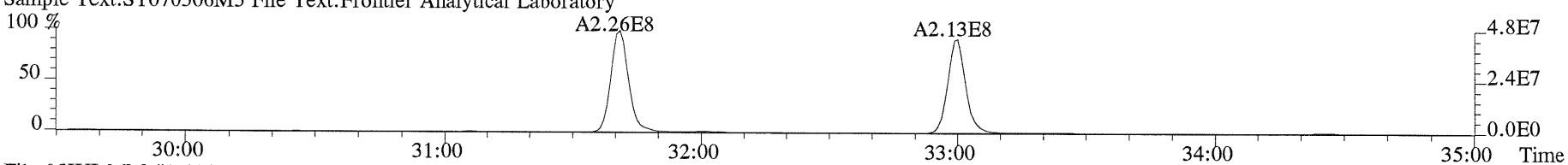
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



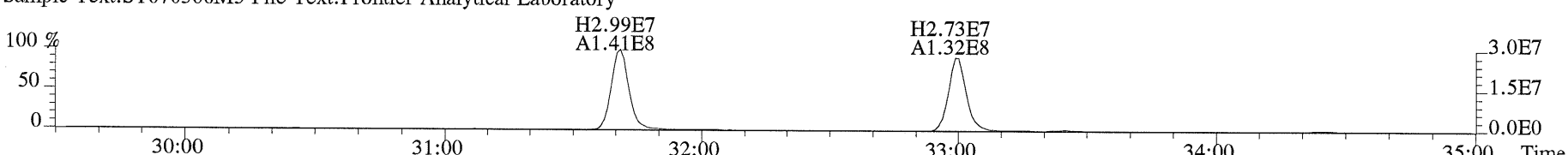
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



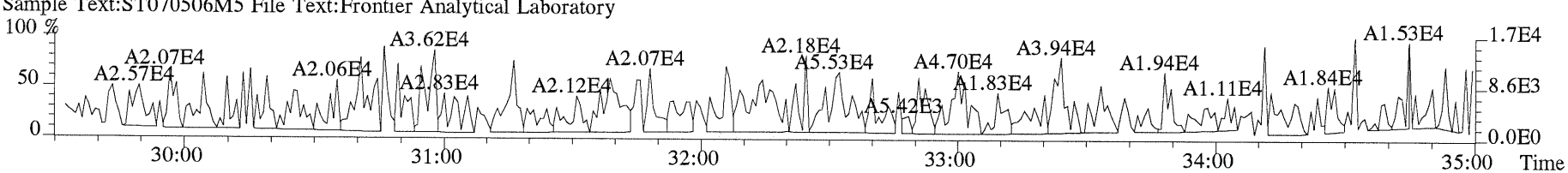
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



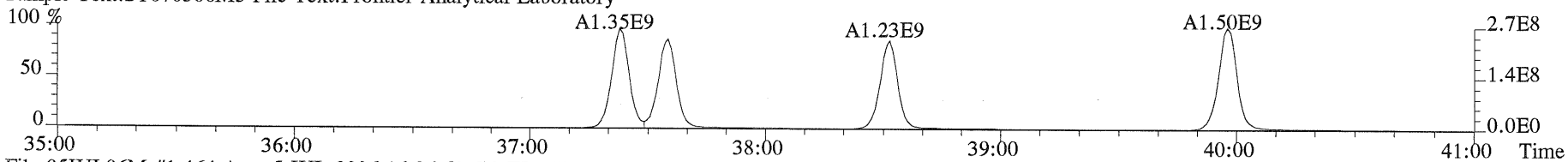
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



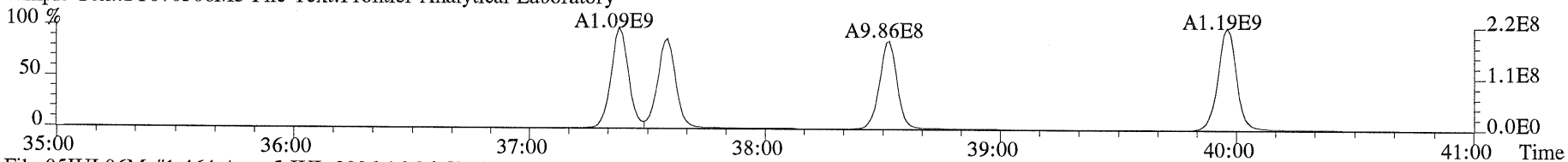
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



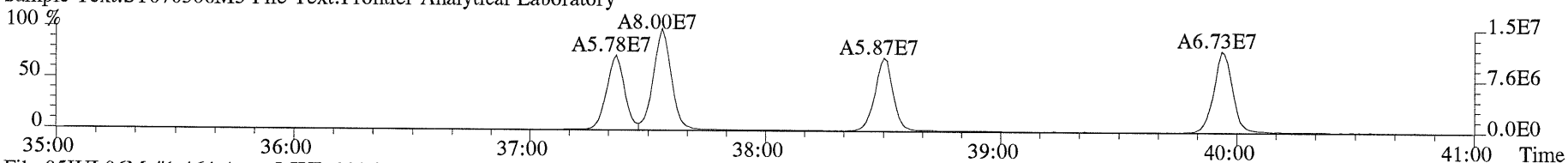
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



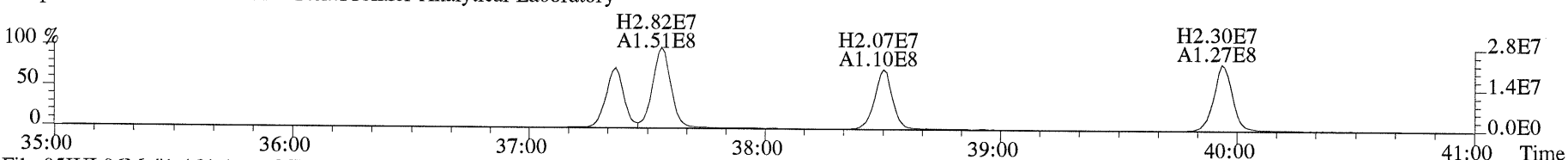
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



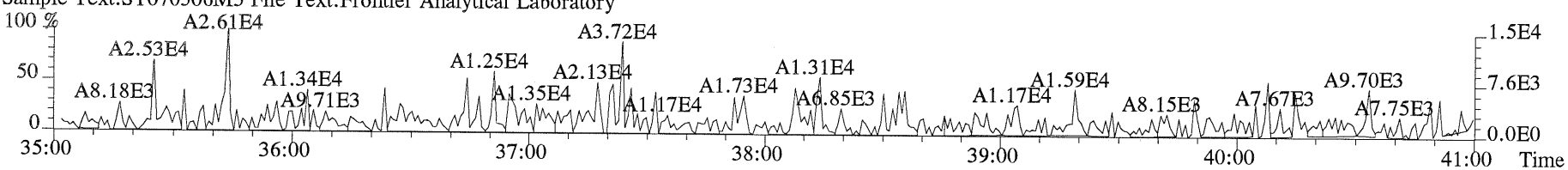
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



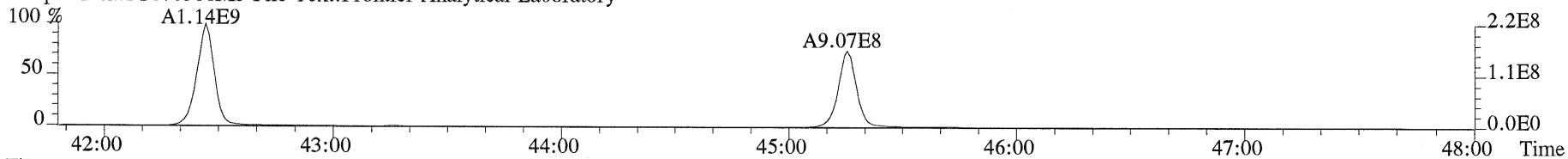
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



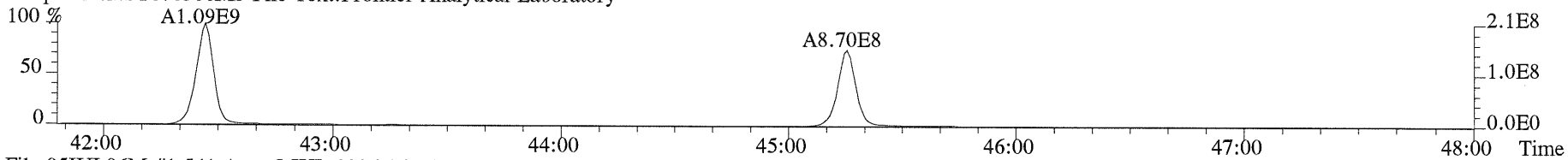
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



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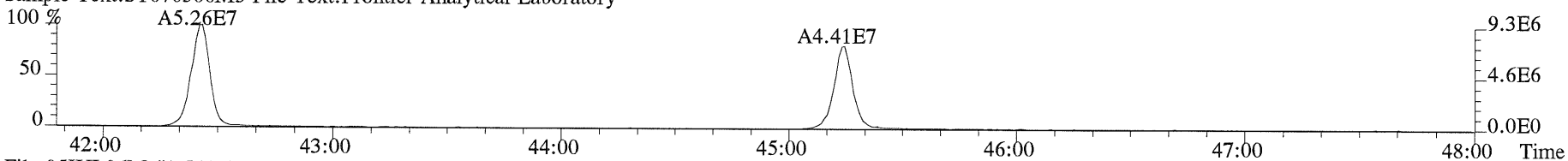
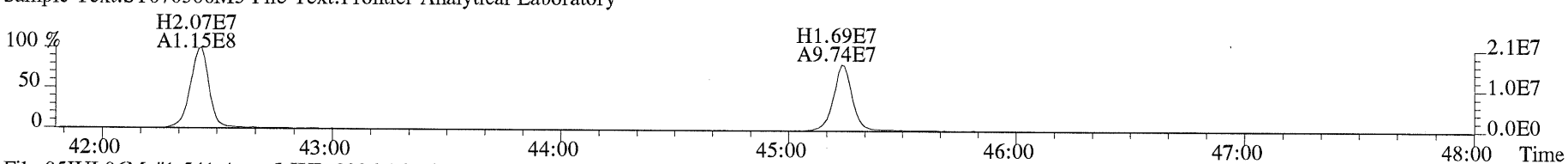
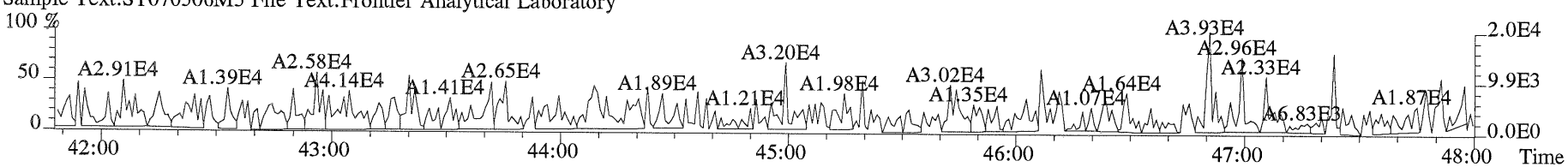
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



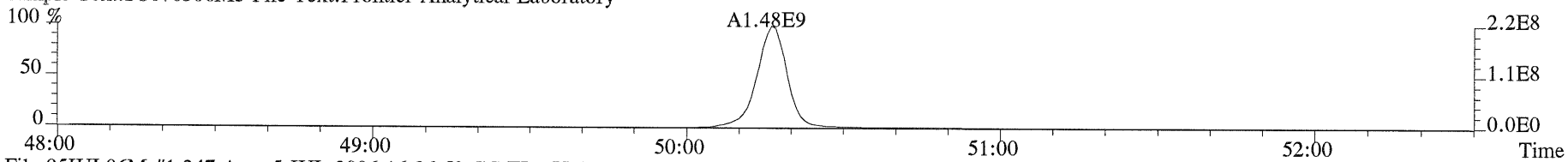
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



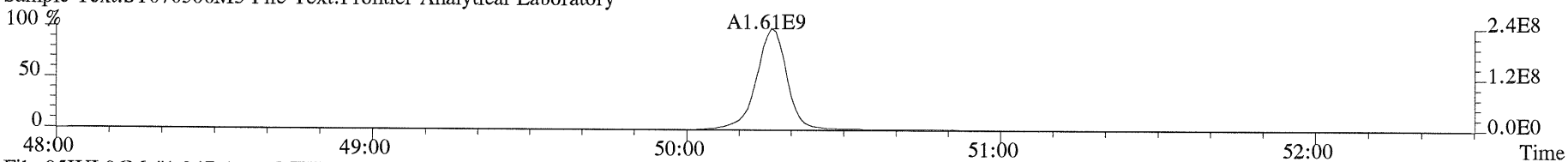
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



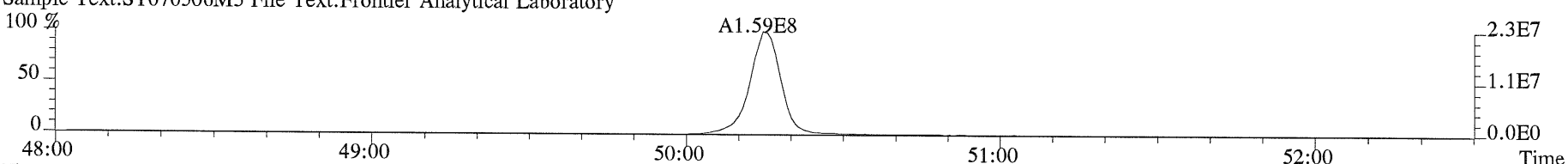
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



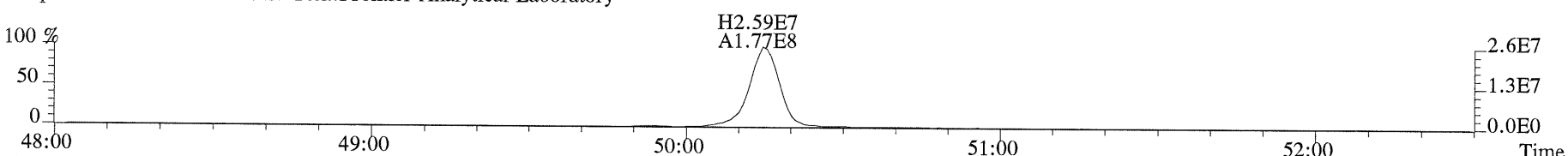
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



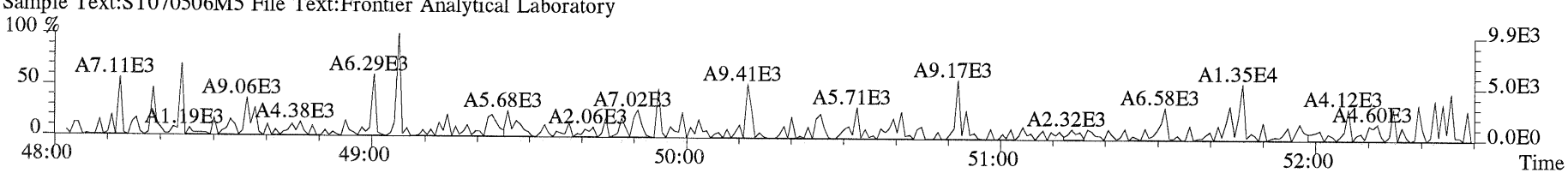
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



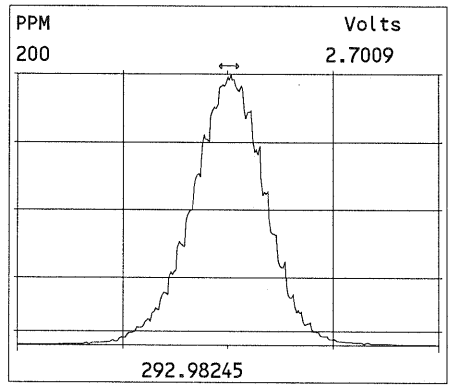
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory

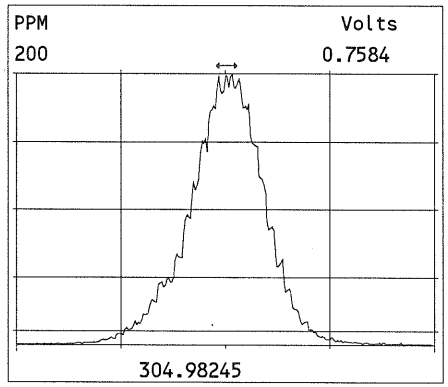


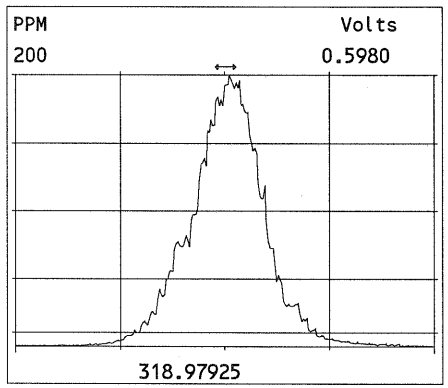
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory

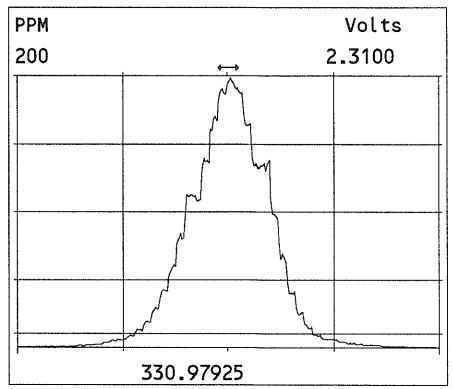


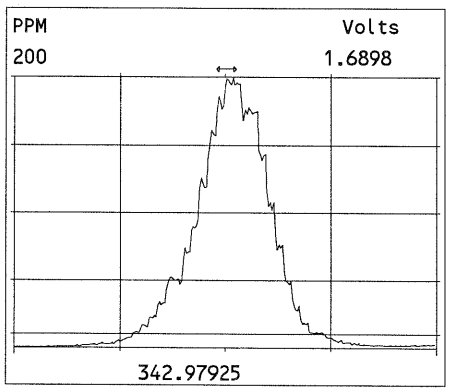
Peak Locate Examination: 6-JUL-2006:07:39 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

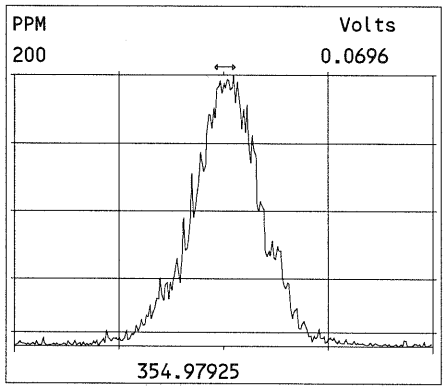


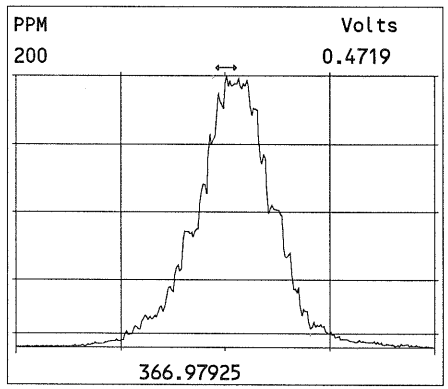


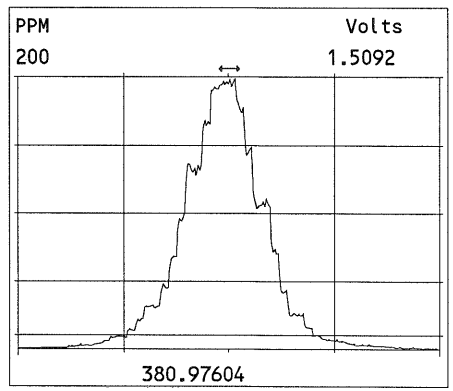


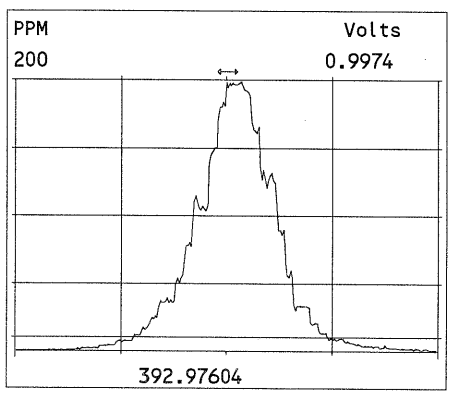


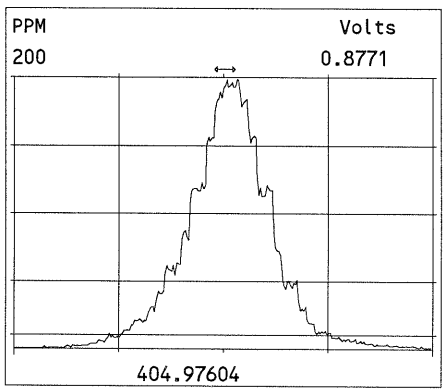


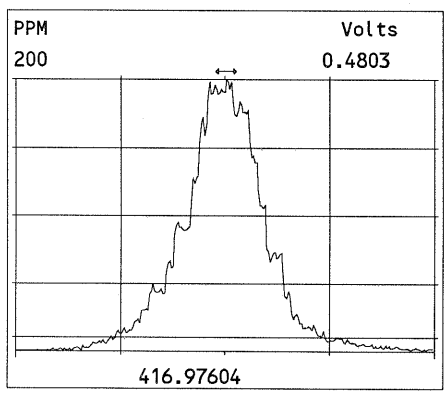




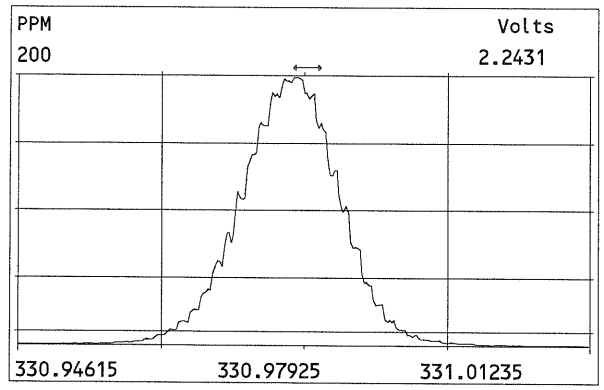


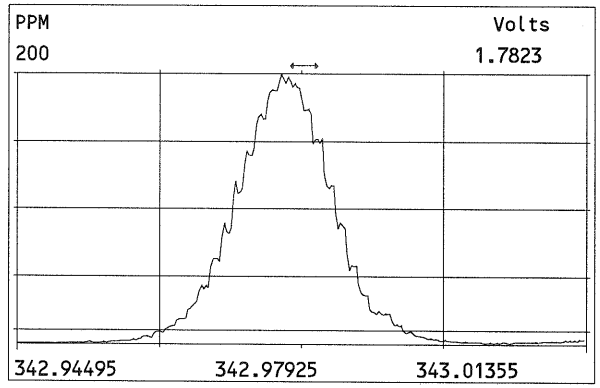


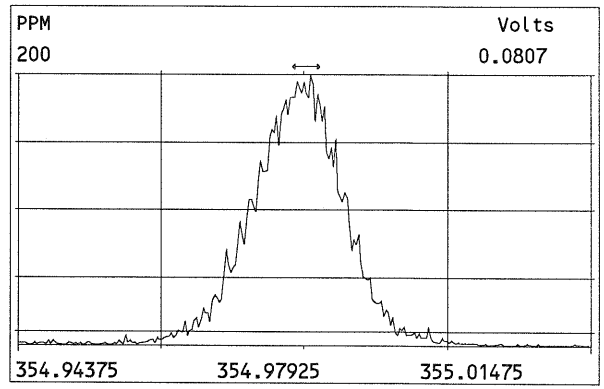


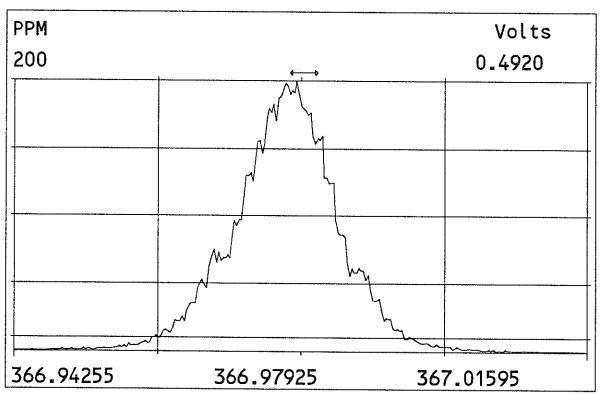


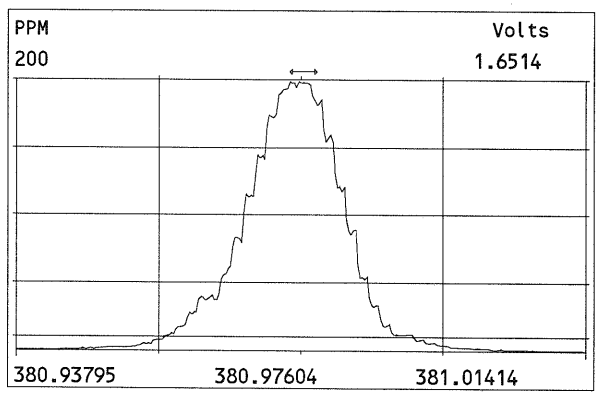
Peak Locate Examination: 6-JUL-2006:07:40 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

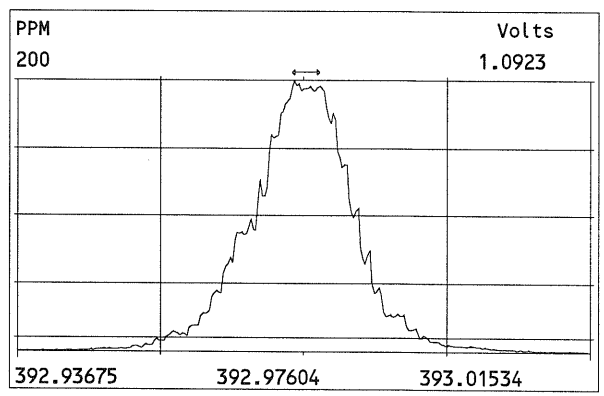


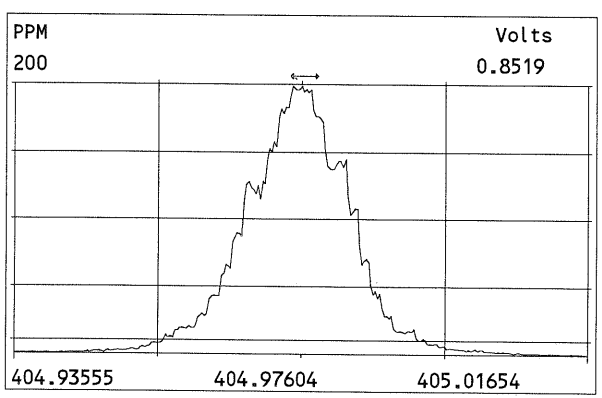


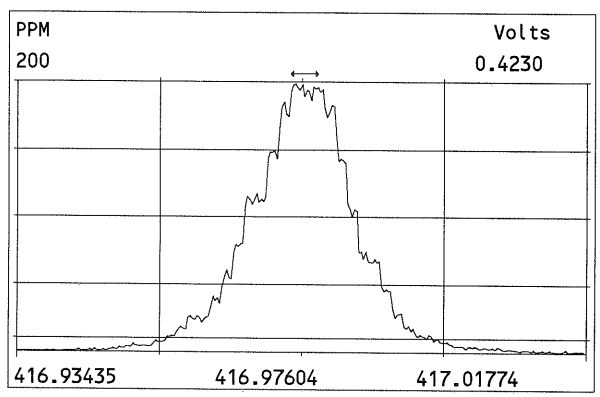




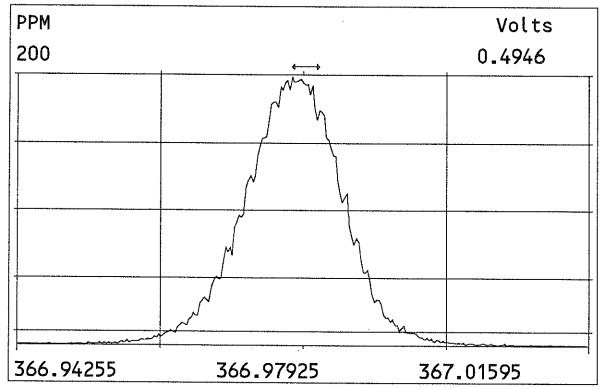


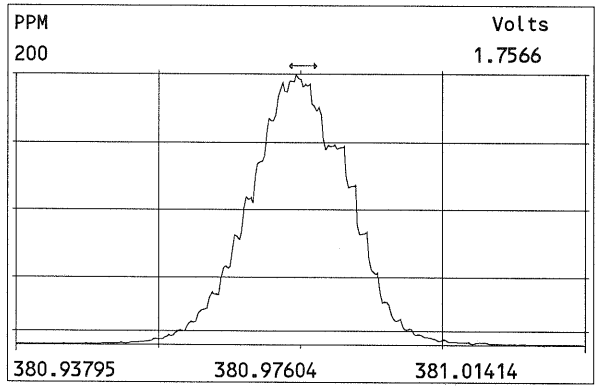


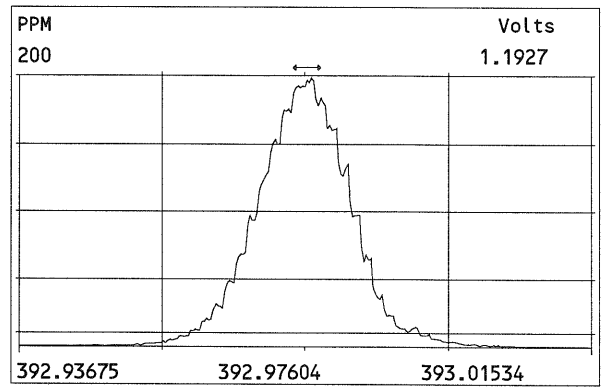


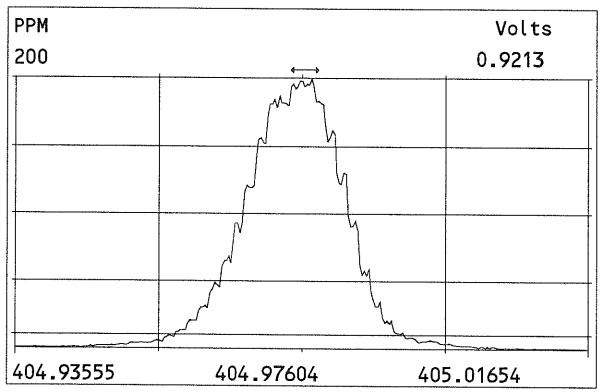


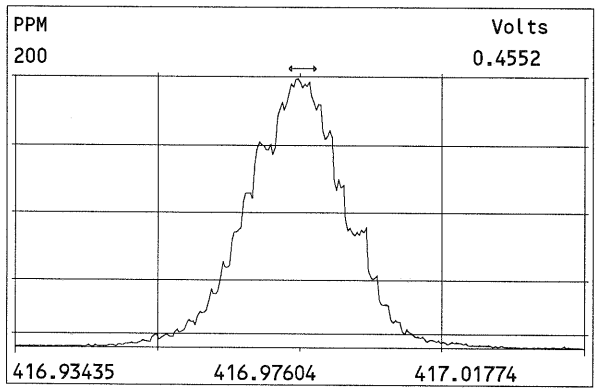
Peak Locate Examination: 6-JUL-2006:07:40 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

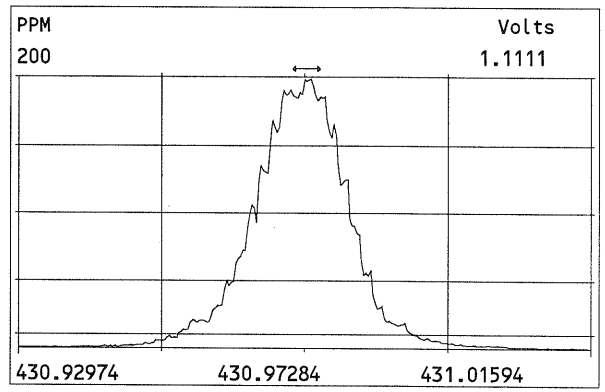


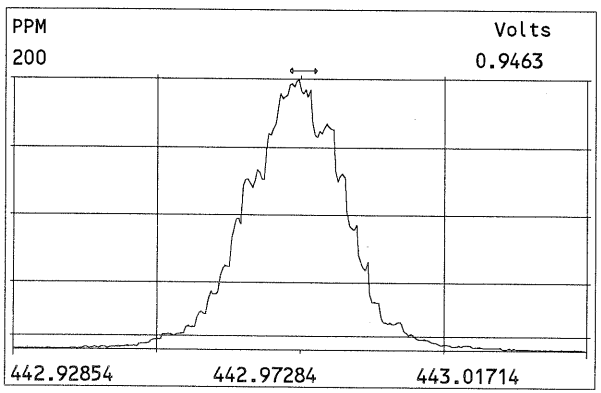


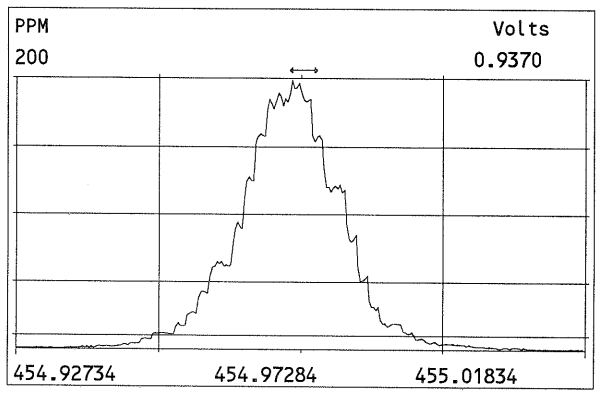




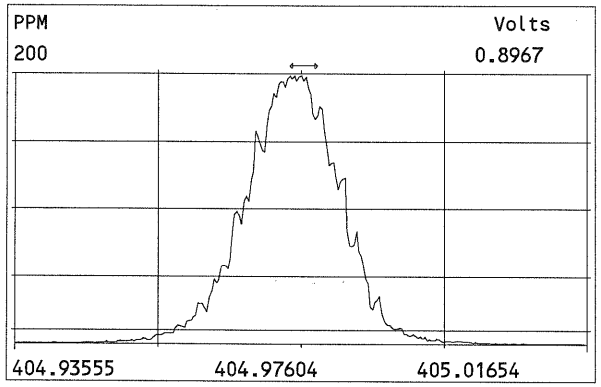


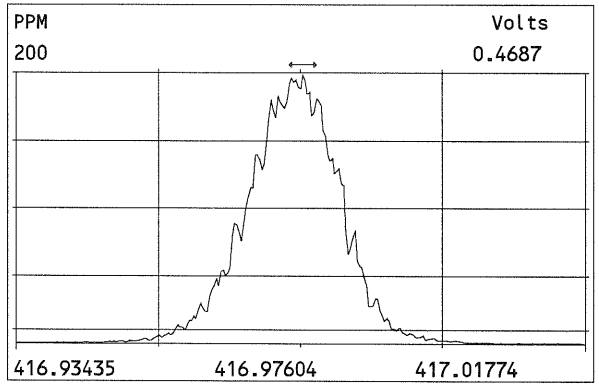


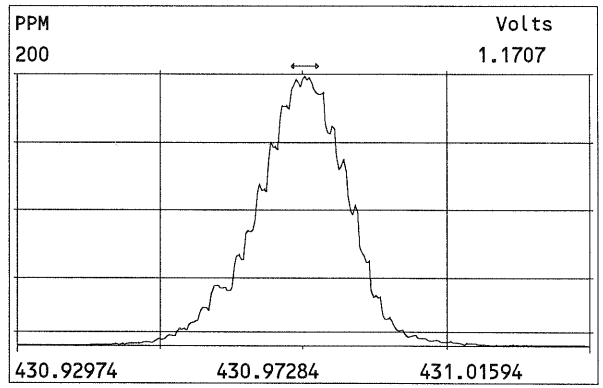


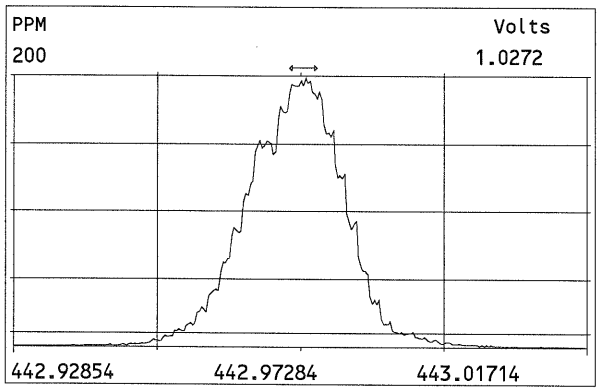


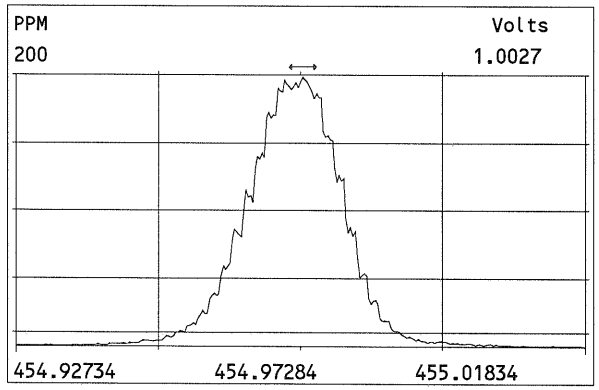
Peak Locate Examination: 6-JUL-2006:07:41 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

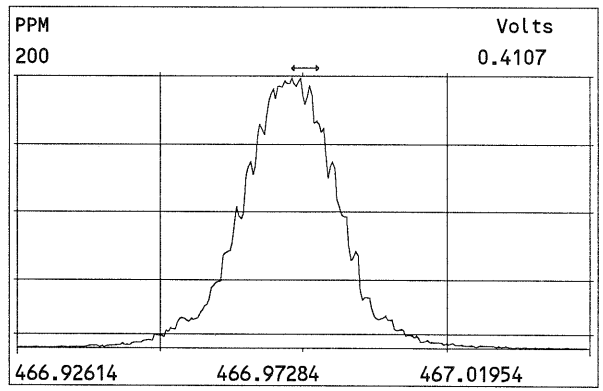


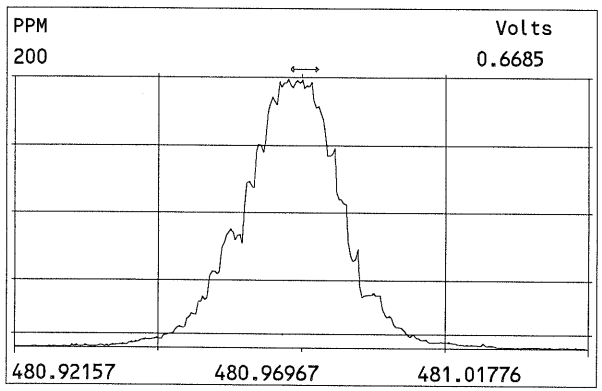




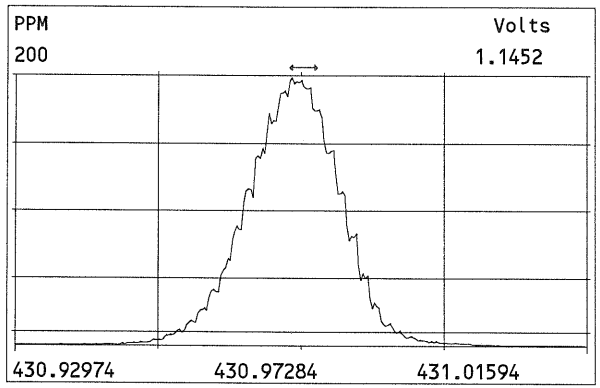


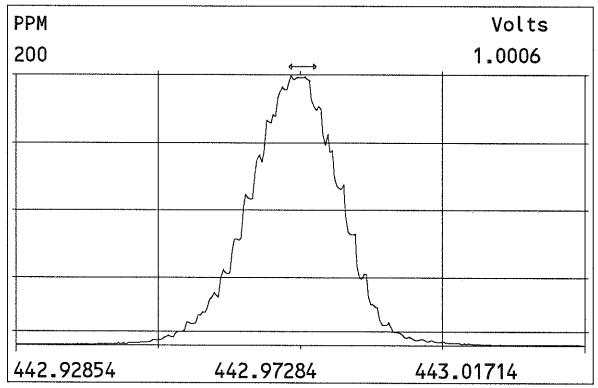


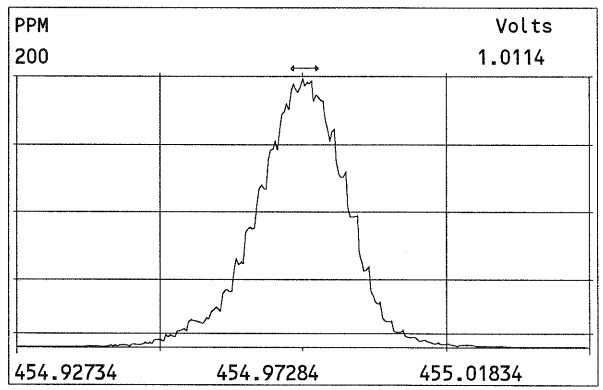


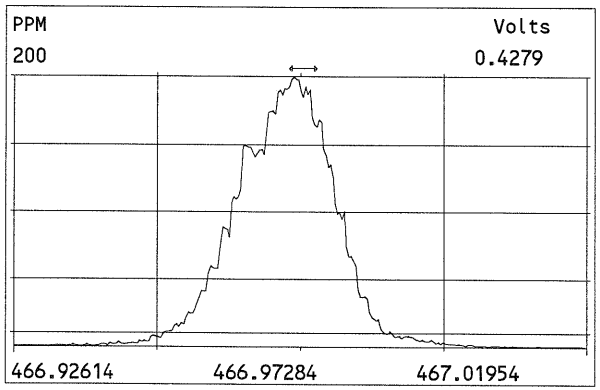


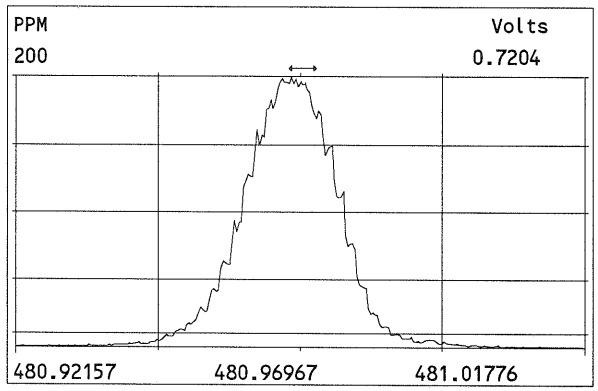
Peak Locate Examination: 6-JUL-2006:07:41 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

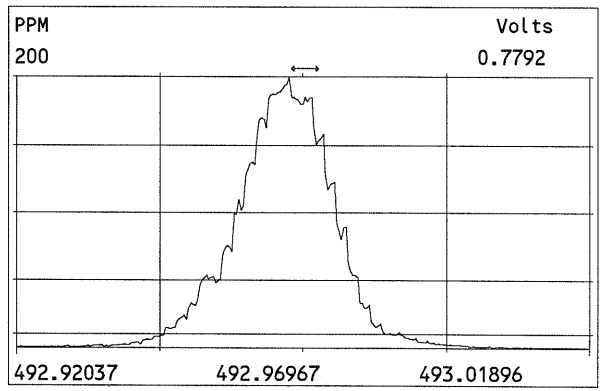


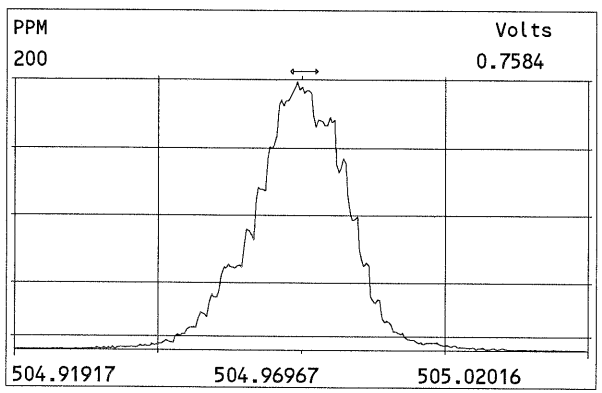


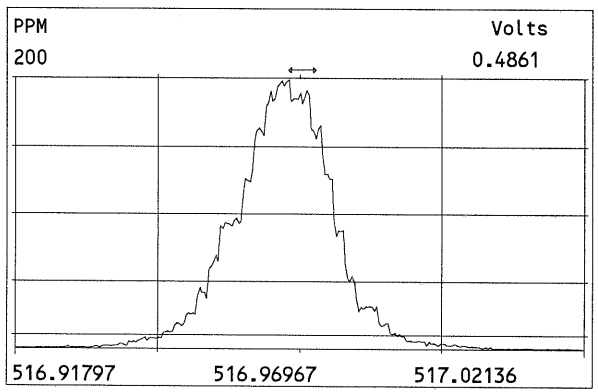












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 14:41:35

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	8.59	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	48.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	47.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	48.0	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	96.4	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	8.58	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	49.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	49.2	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	50.3	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	49.4	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	98.9	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: DJ Date: 7/25/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 14:41:35

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	98.6	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	89.0	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	95.3	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	96.2	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	107	72.0 - 138
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	229	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	99.5	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	93.1	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	90.3	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.4	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	91.0	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	91.6	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	95.1	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	97.3	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	101	77.0 - 129
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	216	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					7.80	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: DN Date: 7/25/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 Time: 14:41:35

DB-5 IS Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 Time: 14:41:35

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:24	1,3,6,8-TCDF (F)	23:03
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:25
1,2,3,8,9-PeCDD (L)	33:47	1,2,3,8,9-PeCDF (L)	34:12
1,2,4,6,7,9-HxCDD (F)	36:06	1,2,3,4,6,8-HxCDF (F)	35:13
1,2,3,7,8,9-HxCDD (L)	39:09	1,2,3,7,8,9-HxCDF (L)	39:43
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:14
1,2,3,4,6,7,8-HpCDD (L)	44:07	1,2,3,4,7,8,9-HpCDF (L)	45:02

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DN Date: 7/25/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 14:41:35 CS3 or VER Data Filename: 25JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.237	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.173	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.223	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DN Date: 7/25/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 14:41:35 CS3 or VER Data Filename: 25JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DPJ Date: 7/25/06

FAL ID: ST072506M1 Filename: 25JUL06M Sam:1 Acquired: 25-JUL-06 14:41:35 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072506M1 EndCal: ST072506M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.0
WHO 1998 Tox: 121

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.29e+07	0.77 y	27:25	1.10	8.59		2.50	-	*	
1,2,3,7,8-PeCDD	5.11e+07	1.59 y	33:12	0.90	48.0		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.14e+07	1.27 y	38:33	0.96	48.7		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.24e+07	1.25 y	38:42	0.83	47.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.78e+07	1.24 y	39:09	0.77	49.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	4.35e+07	1.02 y	44:07	0.86	48.0		2.50	-	*	
OCDD	7.05e+07	0.87 y	49:38	0.87	96.4		2.50	-	*	
2,3,7,8-TCDF	1.57e+07	0.77 y	26:40	0.99	8.58		2.50	-	*	
1,2,3,7,8-PeCDF	7.29e+07	1.58 y	31:29	0.80	49.6		2.50	-	*	
2,3,4,7,8-PeCDF	7.26e+07	1.57 y	32:47	0.88	49.2		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.91e+07	1.26 y	37:10	1.42	50.7		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.58e+07	1.25 y	37:22	0.97	50.1		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.29e+07	1.24 y	38:18	1.26	50.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	6.49e+07	1.27 y	39:43	1.34	50.5		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.58e+07	1.04 y	42:14	1.28	50.3		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.37e+07	1.03 y	45:02	1.22	49.4		2.50	-	*	
OCDF	8.11e+07	0.90 y	50:00	0.90	98.9		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.36e+08	0.77 y	27:23	1.00	98.6					98.6
13C-1,2,3,7,8-PeCDD	1.18e+08	1.59 y	33:10	0.96	89.0					89.0
13C-1,2,3,4,7,8-HxCDD	8.87e+07	1.28 y	38:31	0.90	95.3					95.3
13C-1,2,3,6,7,8-HxCDD	1.08e+08	1.30 y	38:41	1.09	96.2					96.2
13C-1,2,3,4,6,7,8-HpCDD	1.05e+08	1.06 y	44:06	0.96	107					107
13C-OCDD	1.68e+08	0.90 y	49:37	0.71	229					114
13C-2,3,7,8-TCDF	1.84e+08	0.78 y	26:39	0.94	99.5					99.5
13C-1,2,3,7,8-PeCDF	1.84e+08	1.59 y	31:27	1.00	93.1					93.1
13C-2,3,4,7,8-PeCDF	1.68e+08	1.59 y	32:46	0.94	90.3					90.3
13C-1,2,3,4,7,8-HxCDF	8.18e+07	0.51 y	37:08	0.86	92.4					92.4
13C-1,2,3,6,7,8-HxCDF	1.15e+08	0.50 y	37:20	1.23	91.0					91.0
13C-2,3,4,6,7,8-HxCDF	8.34e+07	0.51 y	38:17	0.88	91.6					91.6
13C-1,2,3,7,8,9-HxCDF	9.62e+07	0.51 y	39:43	0.98	95.1					95.1
13C-1,2,3,4,6,7,8-HpCDF	8.65e+07	0.43 y	42:13	0.86	97.3					97.3
13C-1,2,3,4,7,8,9-HpCDF	7.27e+07	0.42 y	45:01	0.70	101					101
13C-OCDF	1.83e+08	0.89 y	49:59	0.82	216					108
37Cl-2,3,7,8-TCDD	8.74e+06		27:24	0.81	7.80					78.0
13C-1,2,3,4-TCDD	1.38e+08	0.79 y	26:48	-	72.3					
13C-1,2,3,4-TCDF	1.98e+08	0.77 y	25:33	-	68.7					
13C-1,2,3,7,8,9-HxCDD	1.03e+08	1.32 y	39:08	-	69.0					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.38e+07		24:06	1.10	35.9		2.50	-	*	20
Total Penta-Dioxins	1.37e+08		30:15	0.90	129		2.50	-	*	14
Total Hexa-Dioxins	1.69e+08		36:06	0.85	203		2.50	-	*	17
Total Hepta-Dioxins	8.36e+07		42:46	0.86	92.2		2.50	-	*	16
Total Tetra-Furans	6.03e+07		23:03	0.99	32.9		2.50	-	*	27
1st Fn. Tot Penta-Furans	7.37e+07		28:25	0.84	50.0		2.50	-	*	1 PeCDF
Total Penta-Furans	1.97e+08		30:10	0.84	134		2.50	-	*	14 184
Total Hexa-Furans	2.95e+08		35:13	1.22	256		2.50	-	*	17
Total Hepta-Furans	1.02e+08		42:14	1.25	102		2.50	-	*	16

Analyst: DPJ Date: 7/25/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:25JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

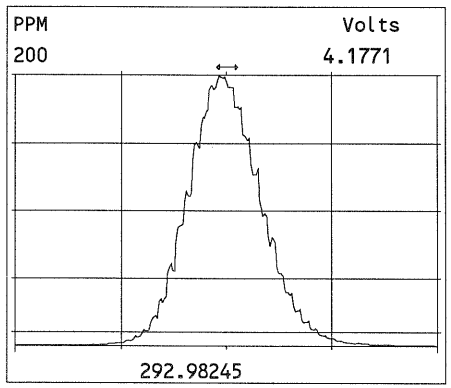
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
25JUL06M	1	ST072506M1	1613 CS3 (051212J)	25-JUL-06 14:41:35	ST072506M1	ST072506M2	DV
25JUL06M	2	3969-006-0001-SA	E2-B4-EP162-182	25-JUL-06 15:44:16	ST072506M1	ST072506M2	DV
25JUL06M	3	3969-009-0001-SA	E1-B1-EP85-164	25-JUL-06 16:39:41	ST072506M1	ST072506M2	DV
25JUL06M	4	SB072506M1	Solvent Blank	25-JUL-06 17:35:04	ST072506M1	ST072506M2	DV
25JUL06M	5	0913-001-0001-OPR	OPR	25-JUL-06 18:30:25	ST072506M1	ST072506M2	DV
25JUL06M	6	0913-001-0001-MB	Method Blank	25-JUL-06 19:25:45	ST072506M1	ST072506M2	DV
25JUL06M	7	3969-004-X002-SA	E8-162-T-C7@15	25-JUL-06 20:21:04	ST072506M1	ST072506M2	DV
25JUL06M	8	3969-002-X002-SA	E3-A4-EP168-181	25-JUL-06 21:16:24	ST072506M1	ST072506M2	DV
25JUL06M	9	SB072506M2	Solvent Blank	25-JUL-06 22:11:47	ST072506M1	ST072506M2	DV
25JUL06M	10	ST072506M2	1613 CS3 (051212J)	25-JUL-06 23:07:06	ST072506M1	ST072506M2	DV
25JUL06M	11	3956-001-0001-SA	IG7-S1	26-JUL-06 00:02:34	ST072506M2	ST072506M3	DV
25JUL06M	12	3963-001-0001-SA	061409-08	26-JUL-06 00:58:02	ST072506M2	ST072506M3	DV
25JUL06M	13	3963-002-0001-SA	061409-09	26-JUL-06 01:53:21	ST072506M2	ST072506M3	DV
25JUL06M	14	3963-003-0001-SA	061409-10	26-JUL-06 02:48:37	ST072506M2	ST072506M3	DV
25JUL06M	15	3967-001-0001-SA	C-4, S-1	26-JUL-06 03:43:56	ST072506M2	ST072506M3	DV
25JUL06M	16	3968-001-0001-SA	STC-1	26-JUL-06 04:39:22	ST072506M2	ST072506M3	DV
25JUL06M	17	3968-002-0001-SA	STC-2	26-JUL-06 05:34:41	ST072506M2	ST072506M3	DV
25JUL06M	18	3968-003-0001-SA	STC-3	26-JUL-06 06:30:01	ST072506M2	ST072506M3	DV
25JUL06M	19	3968-004-0001-SA	STC-4	26-JUL-06 07:25:21	ST072506M2	ST072506M3	DV
25JUL06M	20	SB072506M3	Solvent Blank	26-JUL-06 08:20:42	ST072506M2	ST072506M3	DV
25JUL06M	21	ST072506M3	1613 CS3 (051212J)	26-JUL-06 09:16:01	ST072506M2	ST072506M3	DV

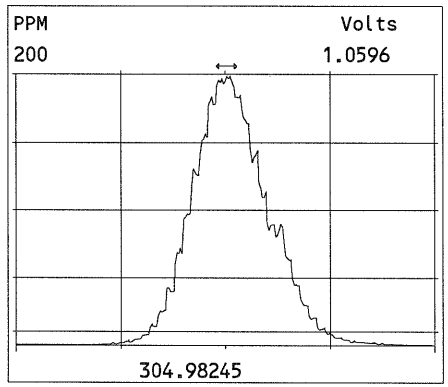
7/26/06

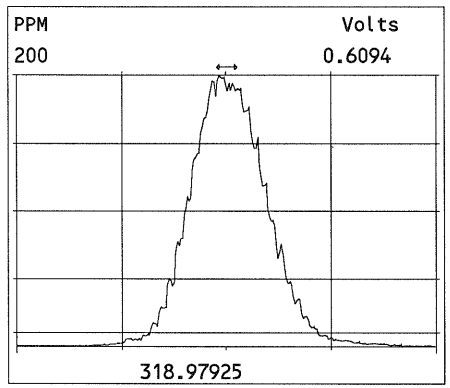
Data Backed Up:_____

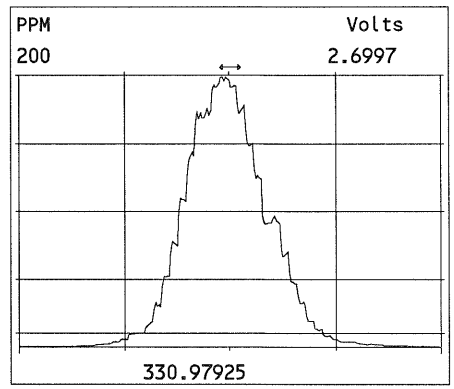
Date:_____

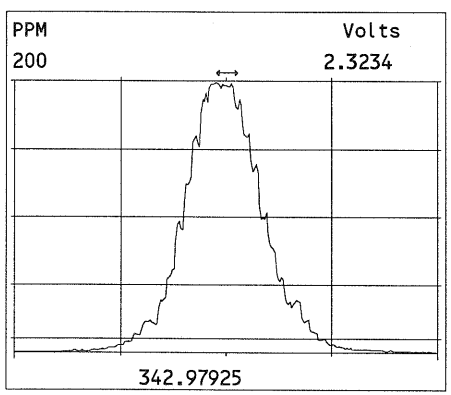
Peak Locate Examination:25-JUL-2006:14:39 File:25JUL06M
Experiment:PCDD Function:1 Reference:PFK

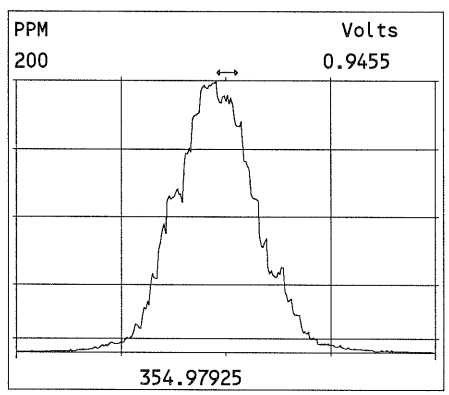


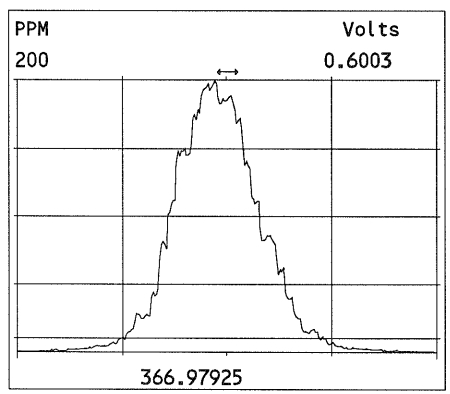


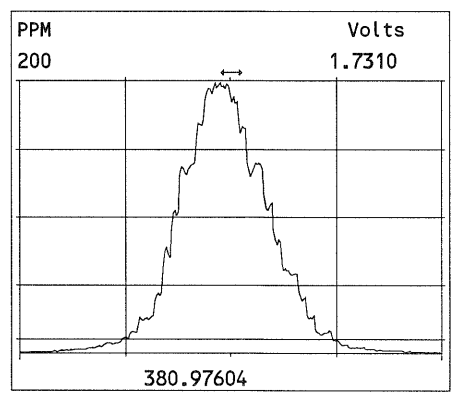


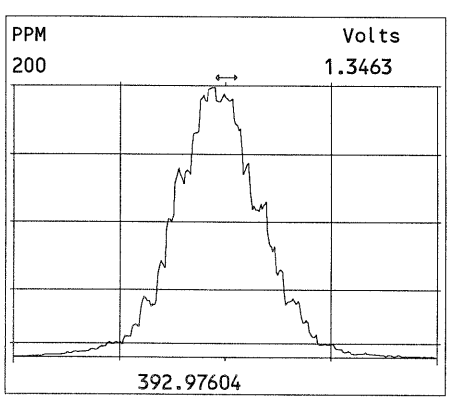


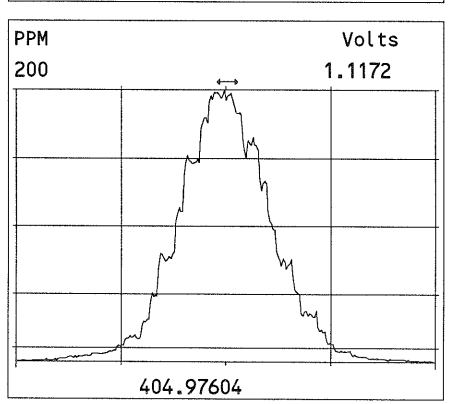


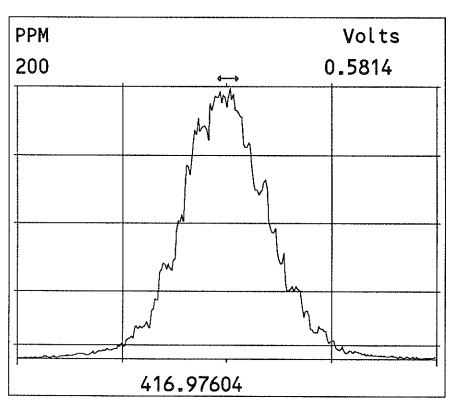




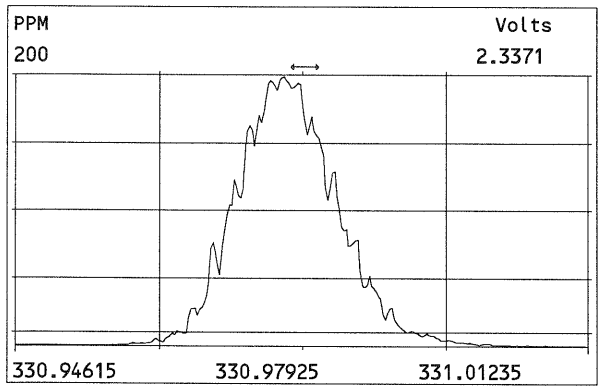


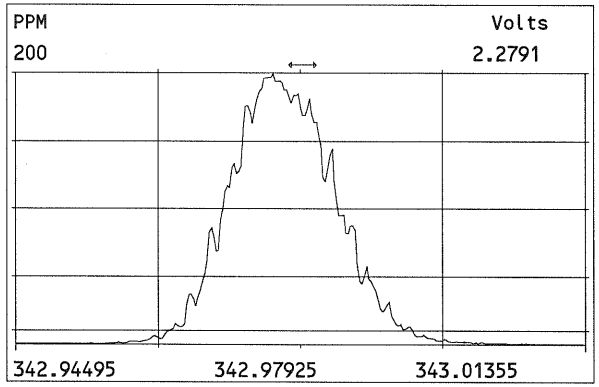


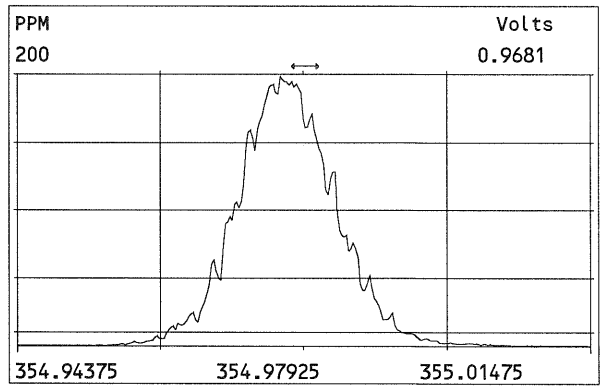


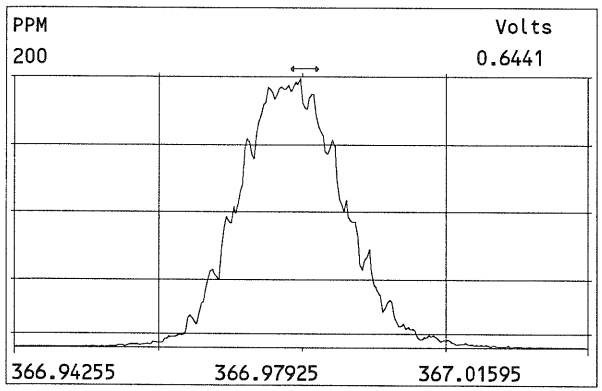


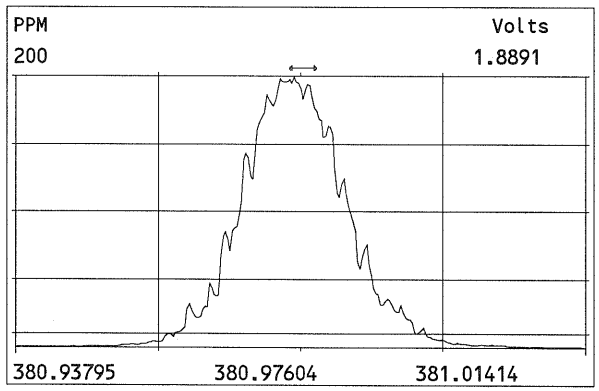
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:2 Reference:PFK

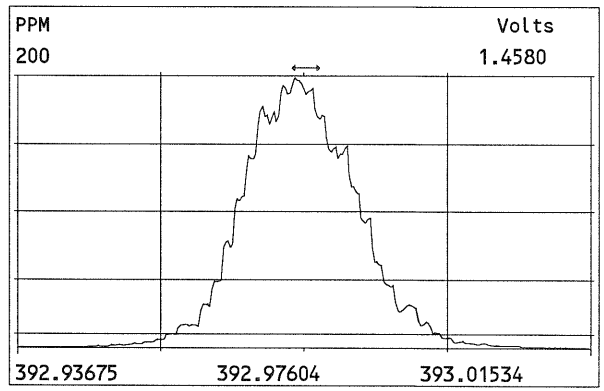


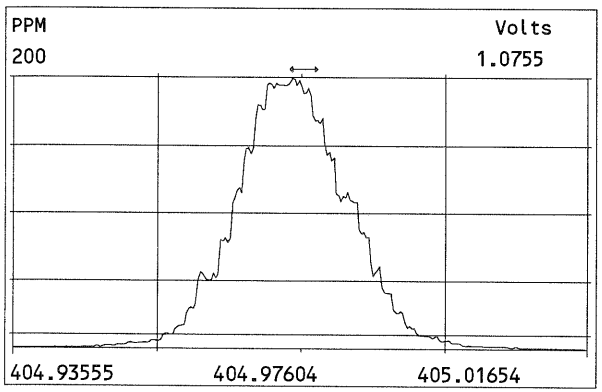


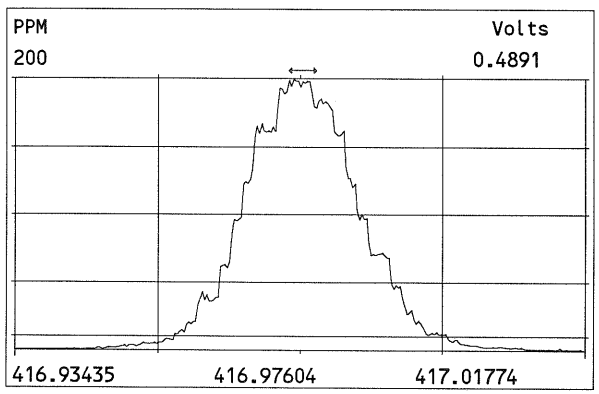




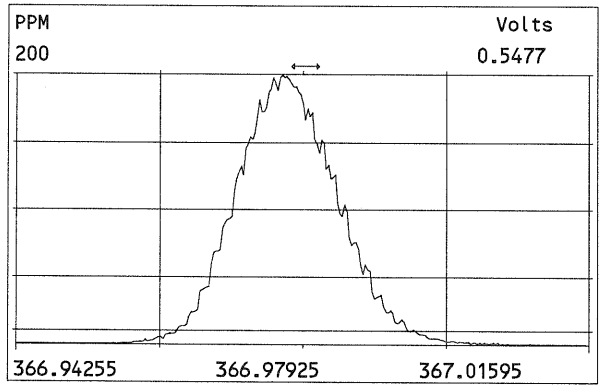


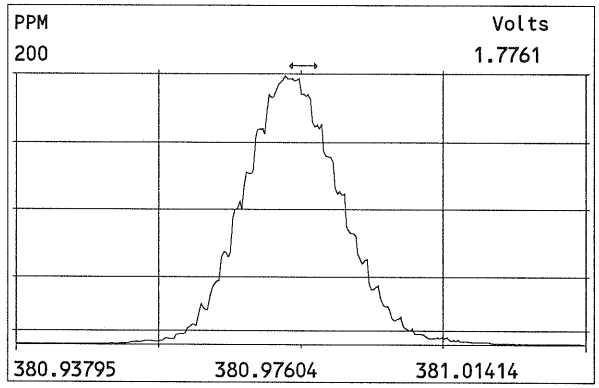


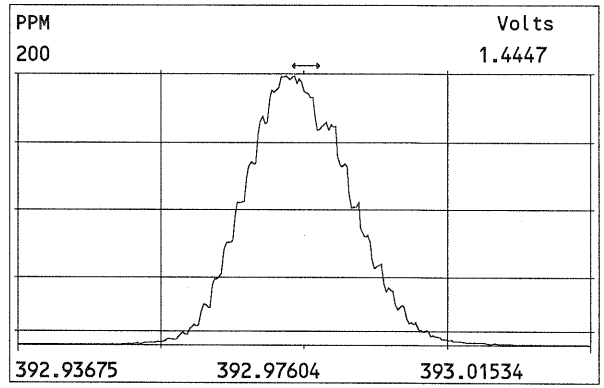


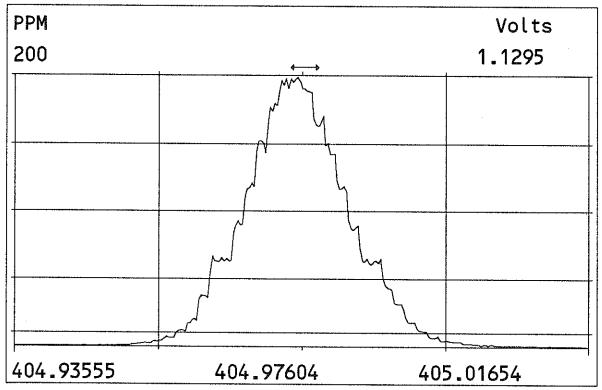


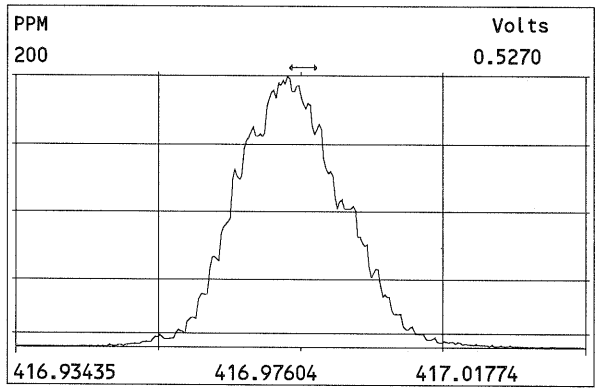
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:3 Reference:PFK

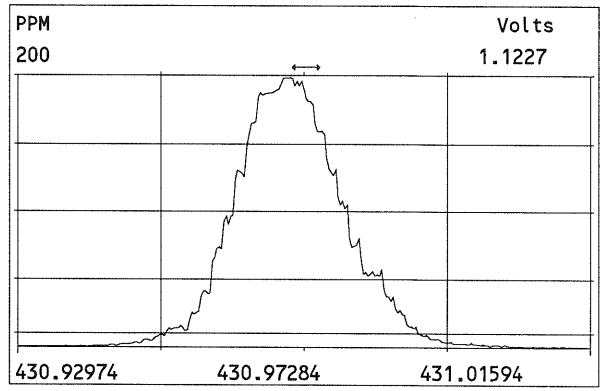


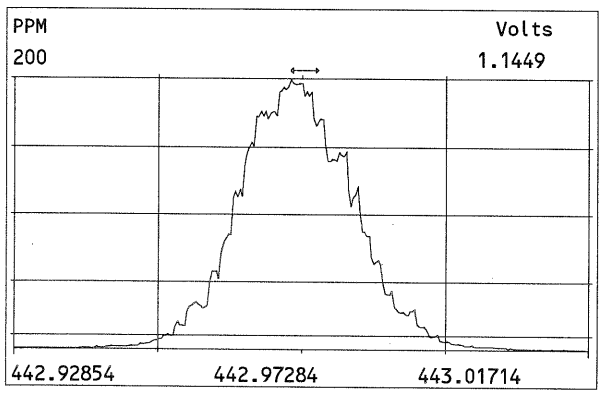


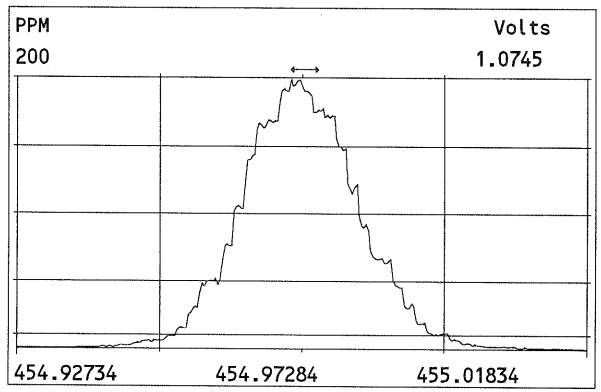




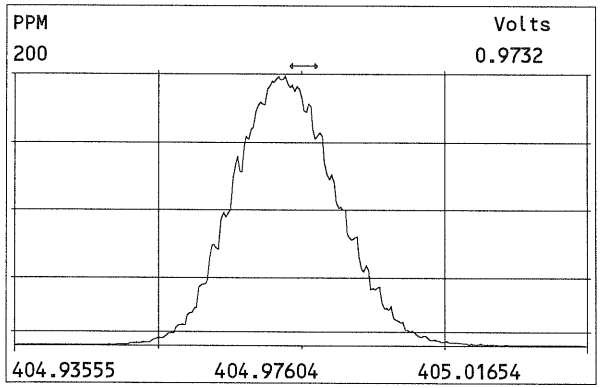


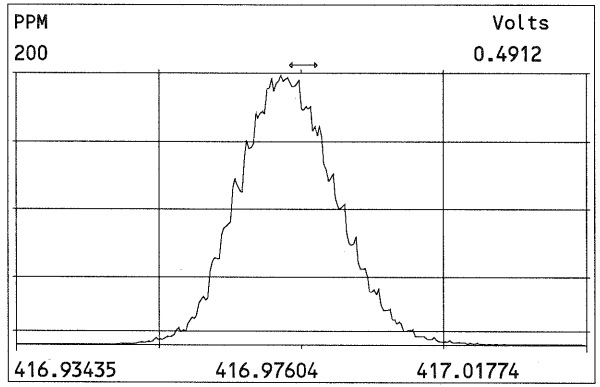


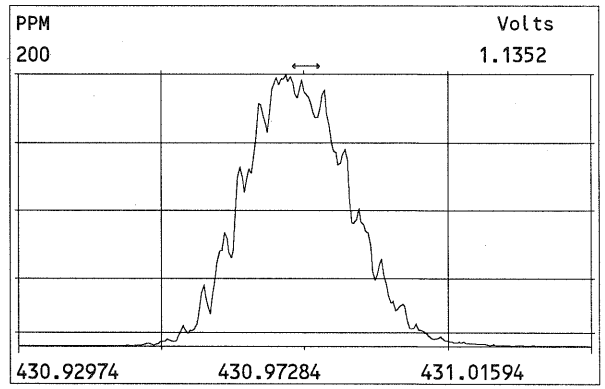


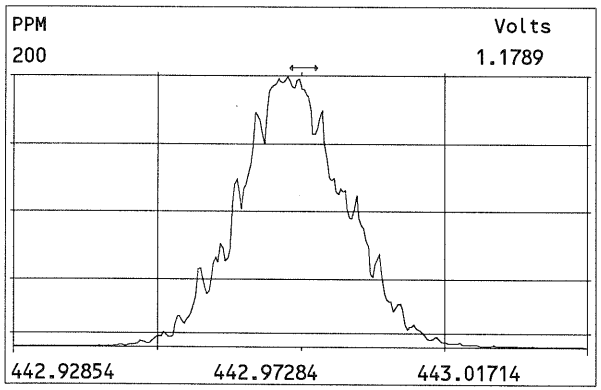


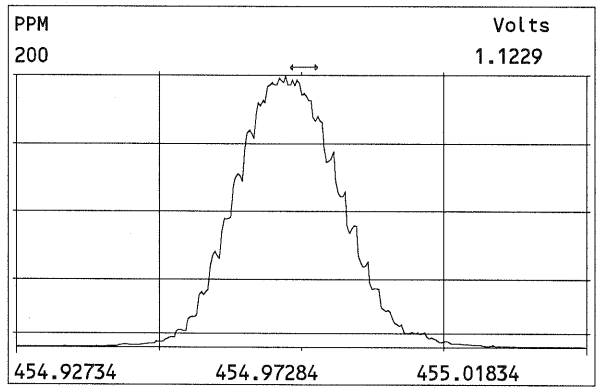
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:4 Reference:PFK

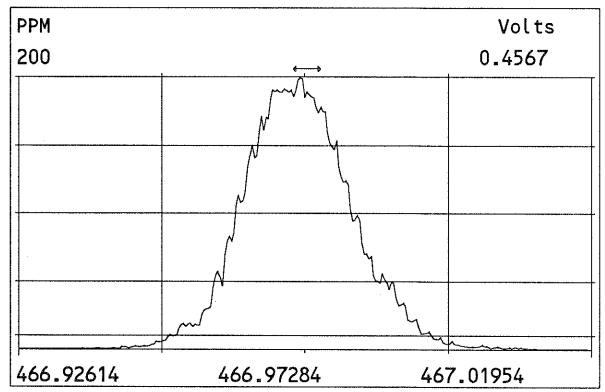


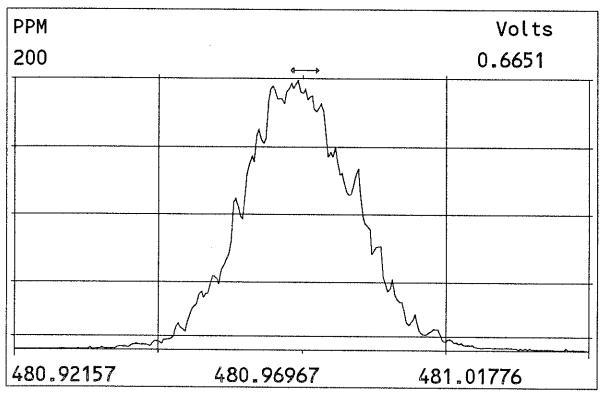




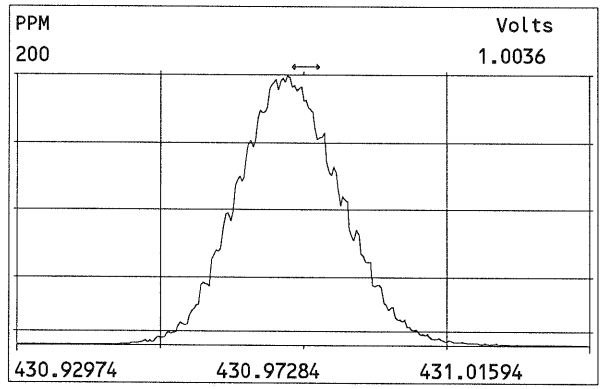


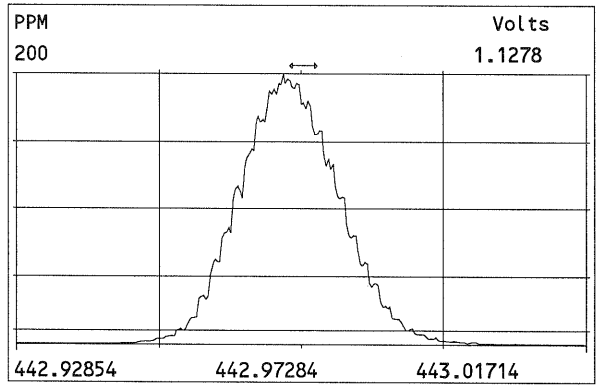


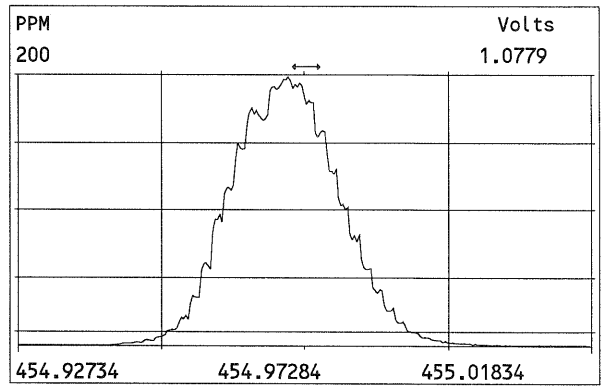


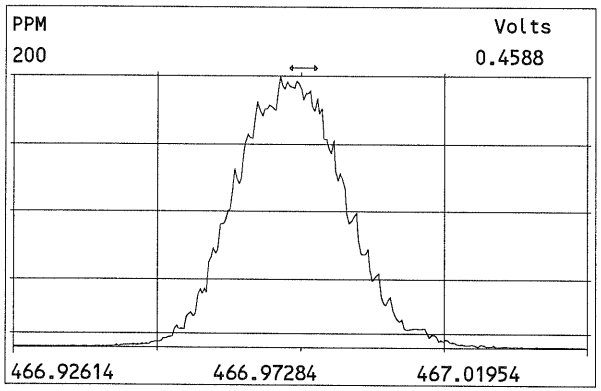


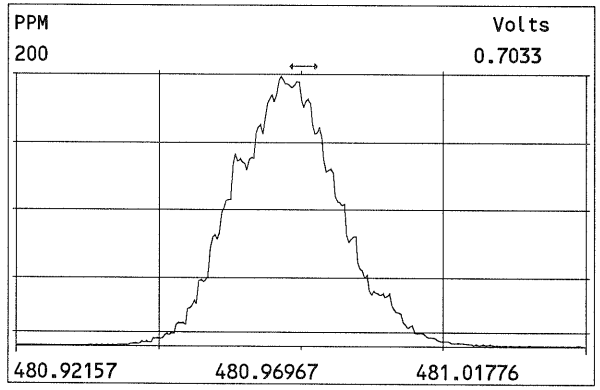
Peak Locate Examination:25-JUL-2006:14:41 File:25JUL06M
Experiment:PCDD Function:5 Reference:PFK

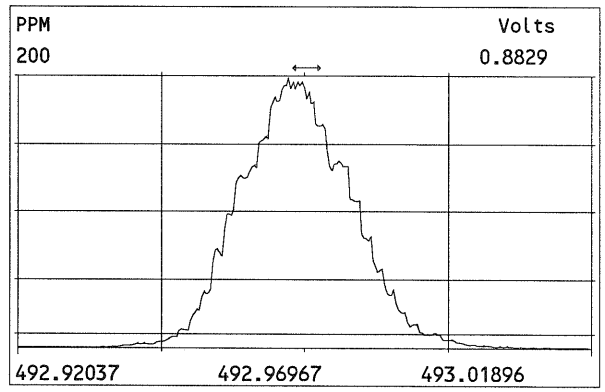


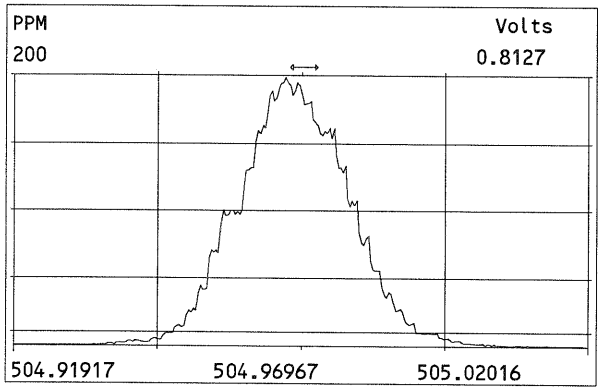


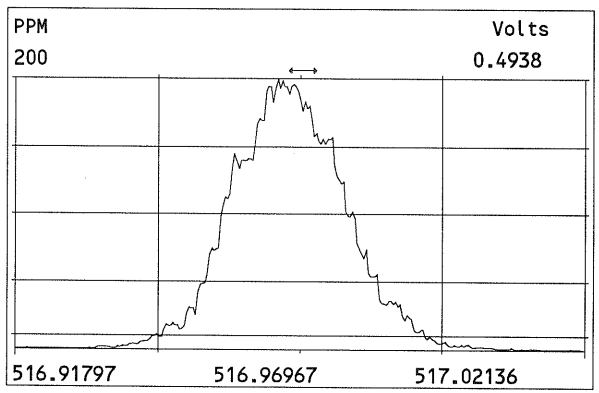




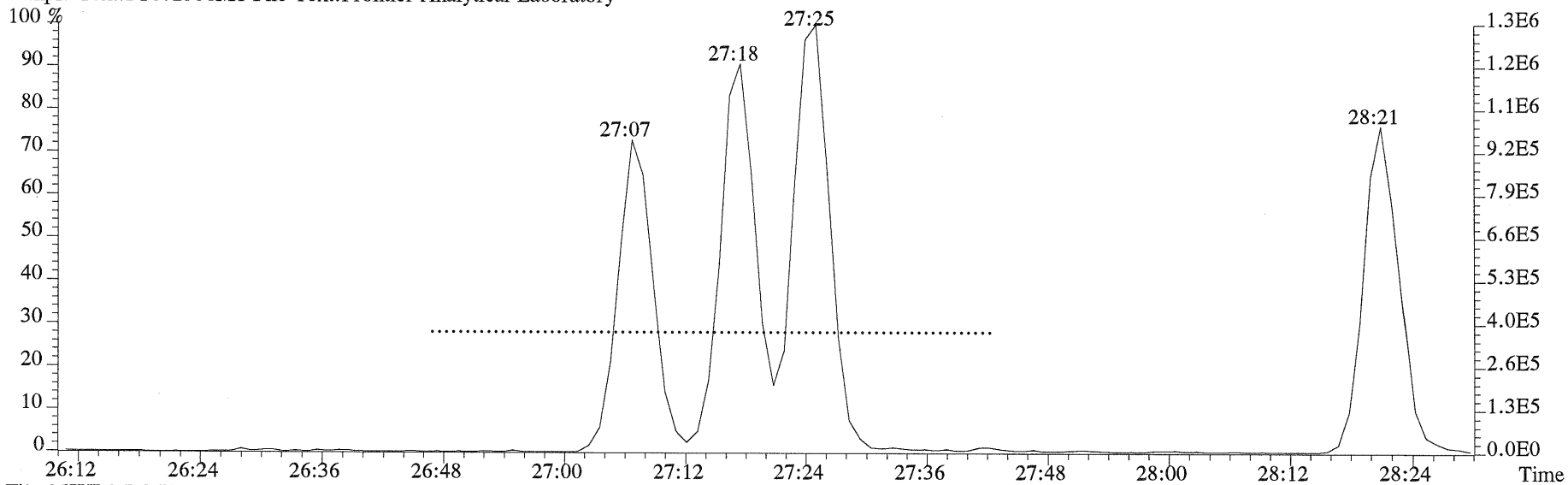








File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST072506M1 File Text:Frontier Analytical Laboratory



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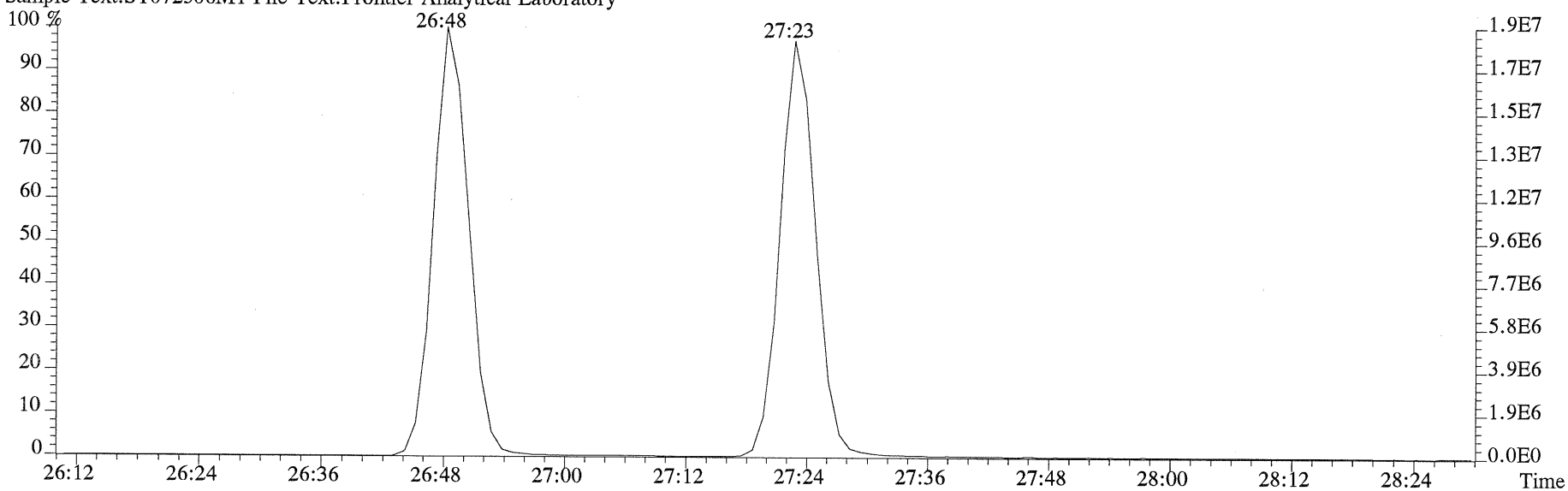

File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
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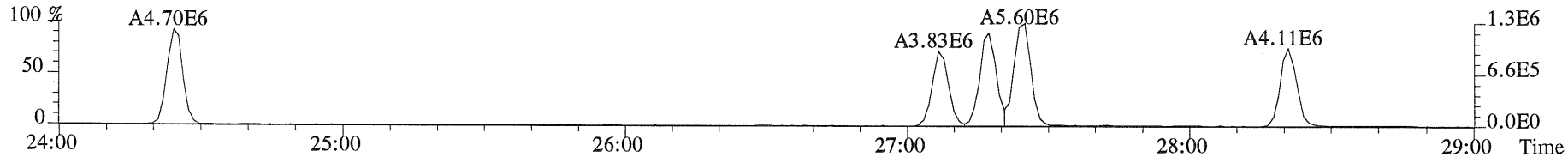

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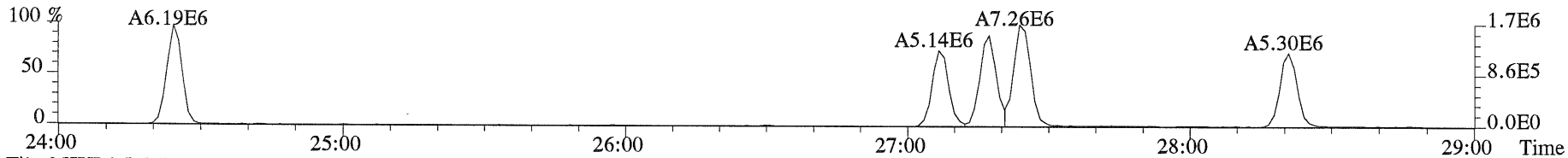
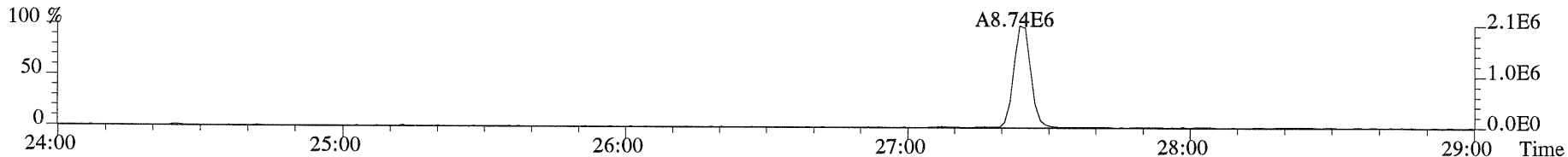
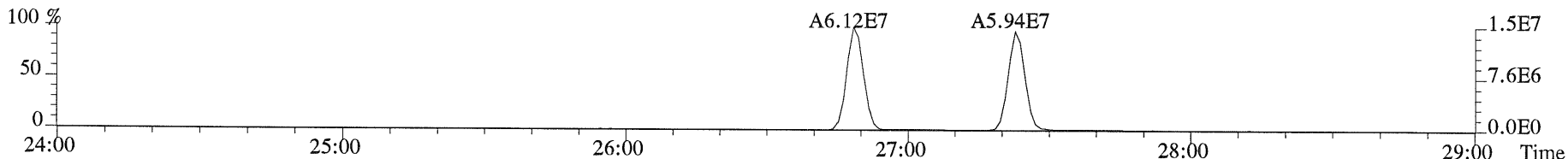


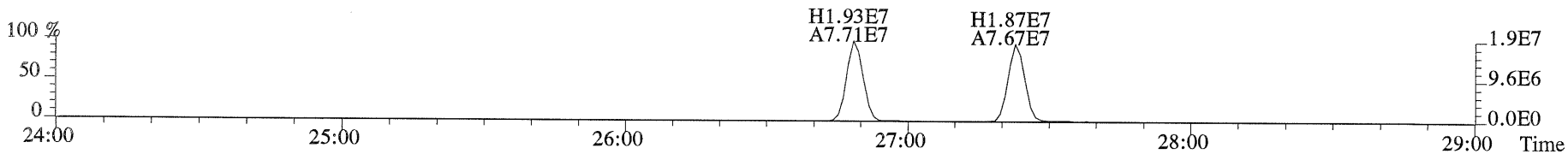
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



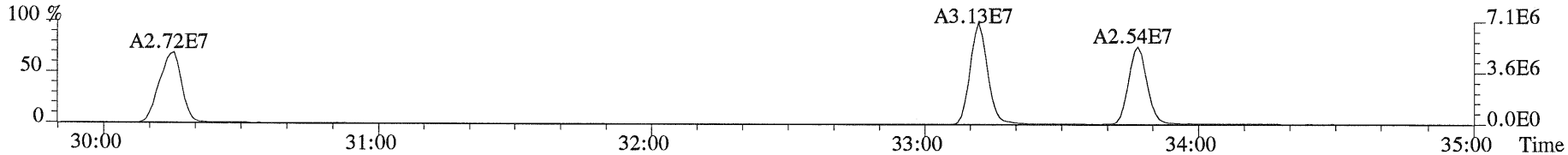
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



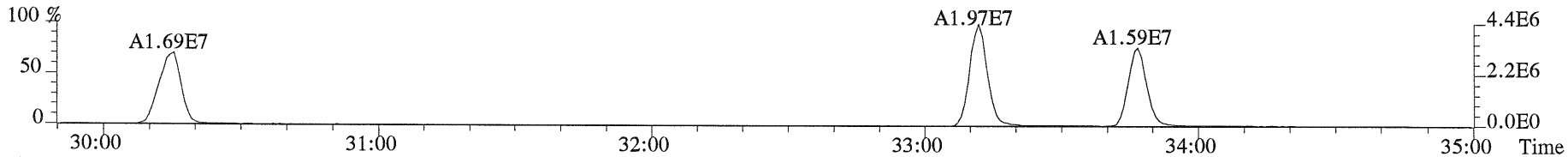
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



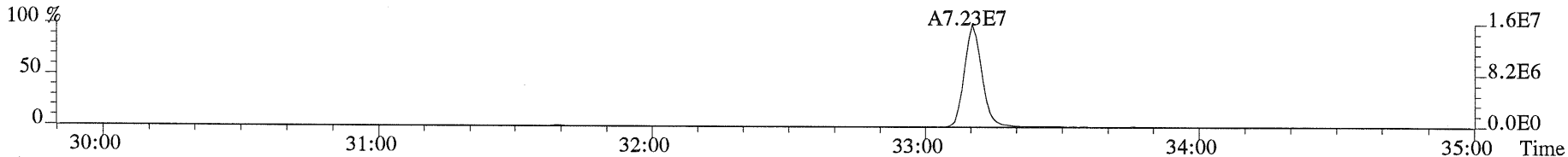
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



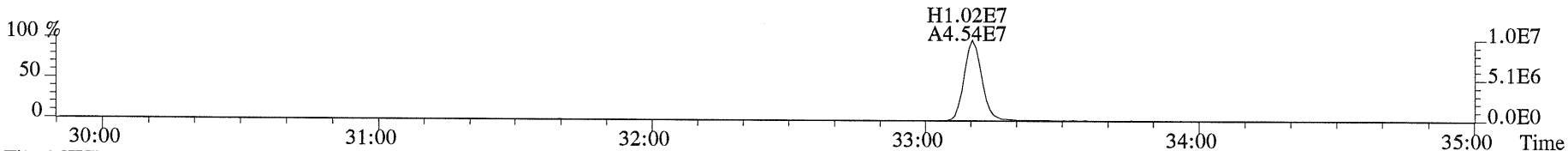
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



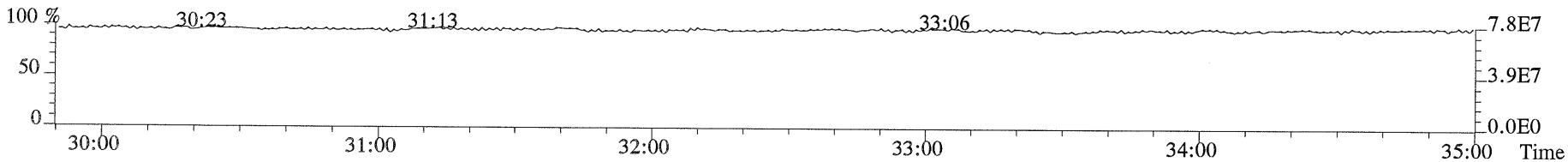
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



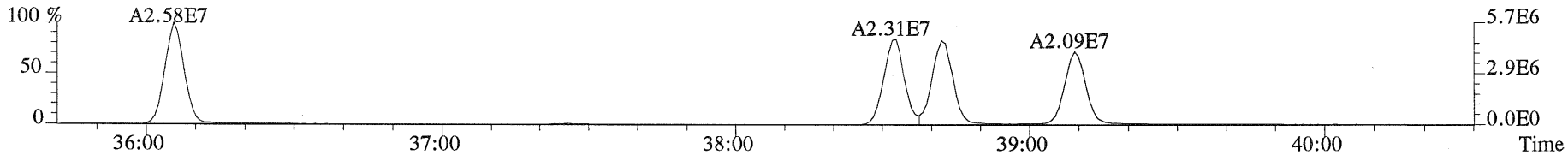
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



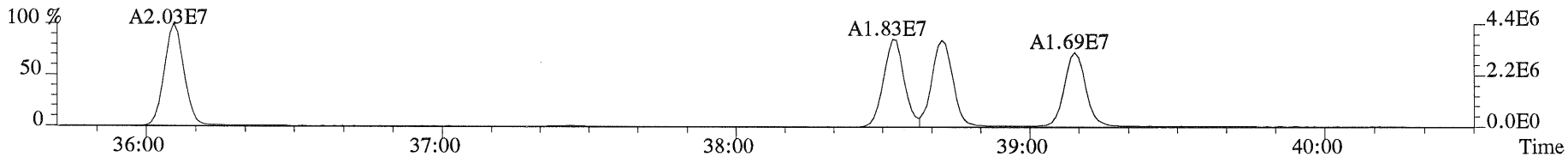
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD



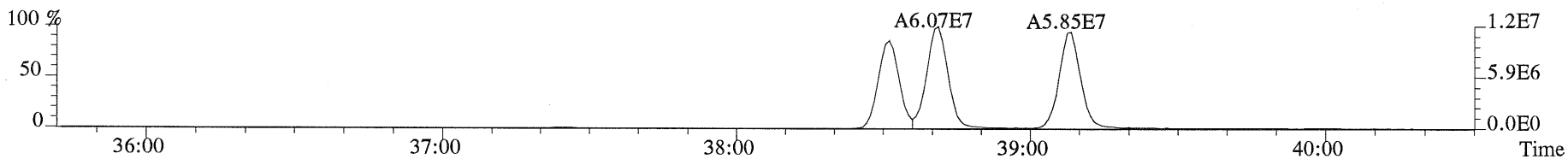
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



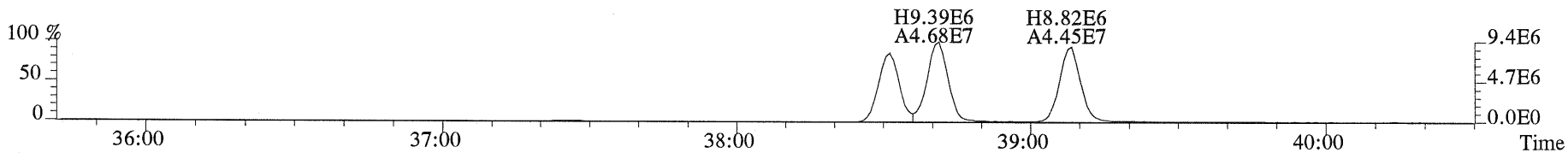
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



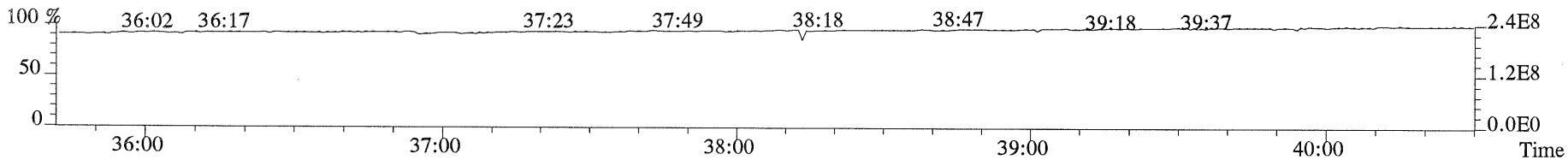
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



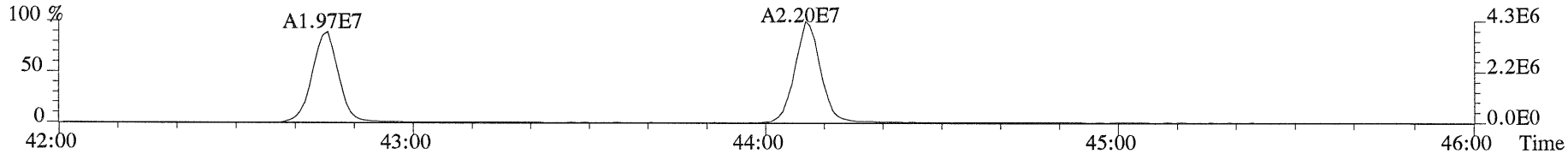
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



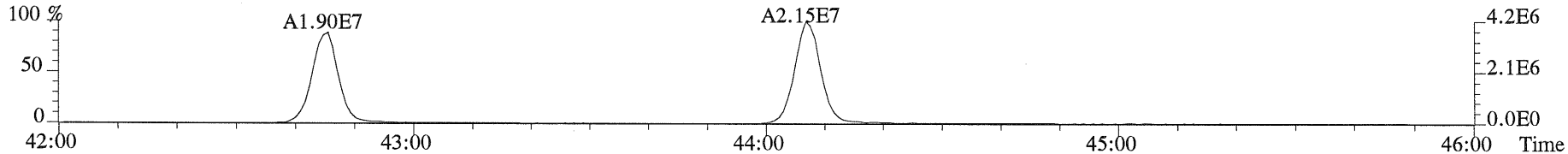
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD



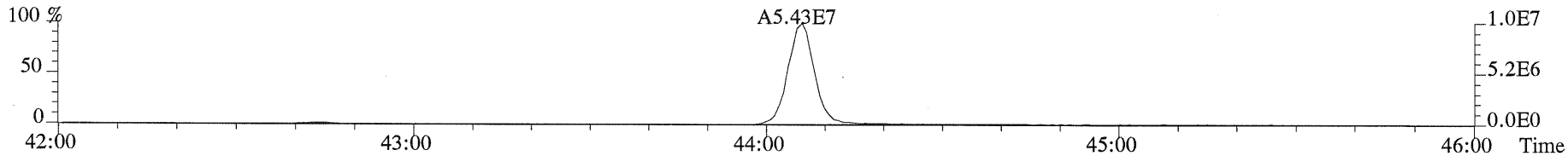
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



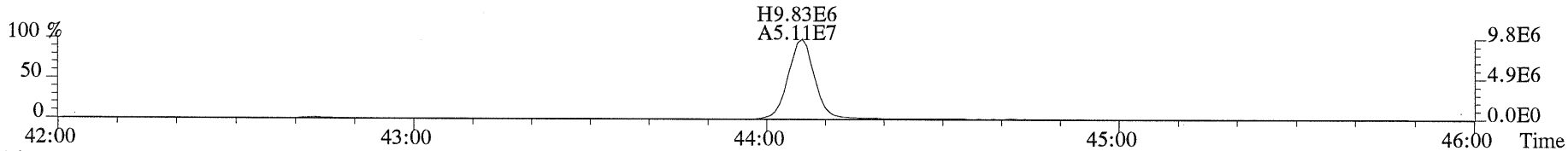
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



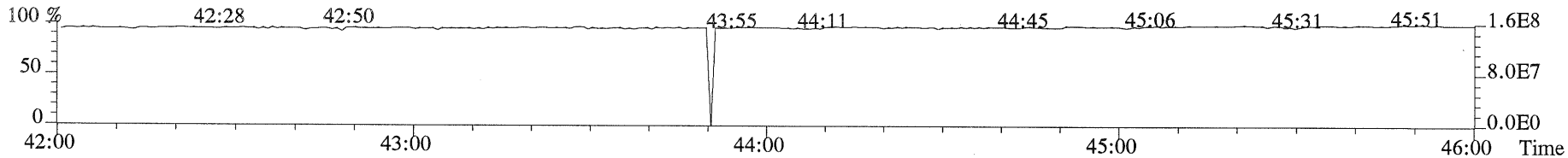
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



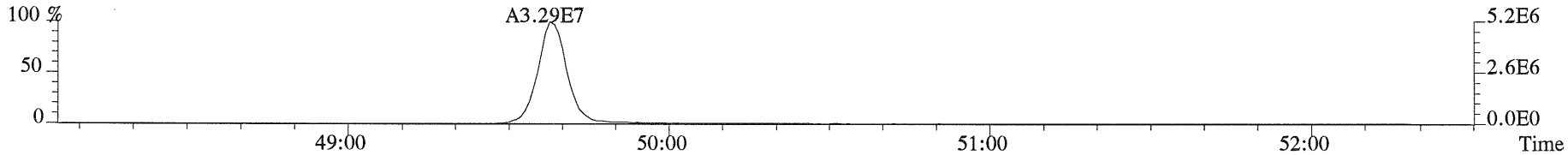
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



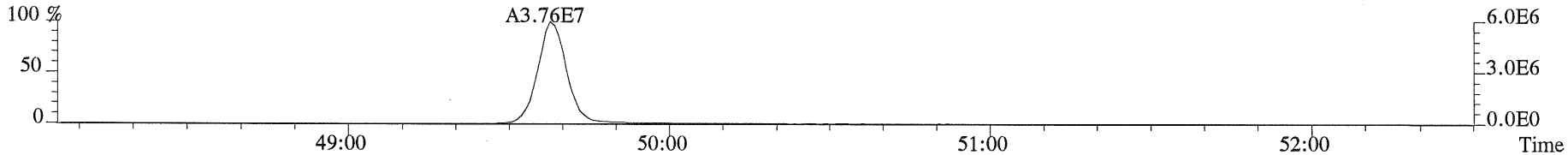
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD



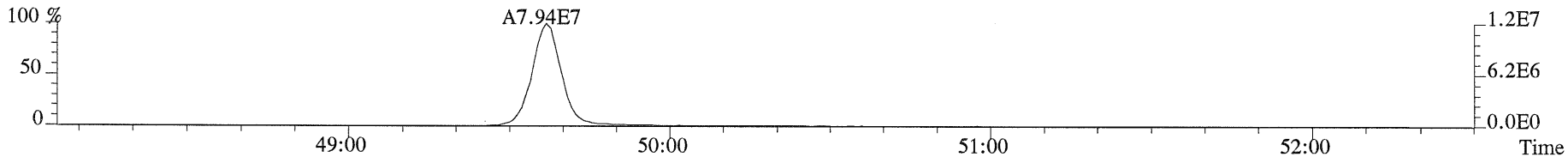
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



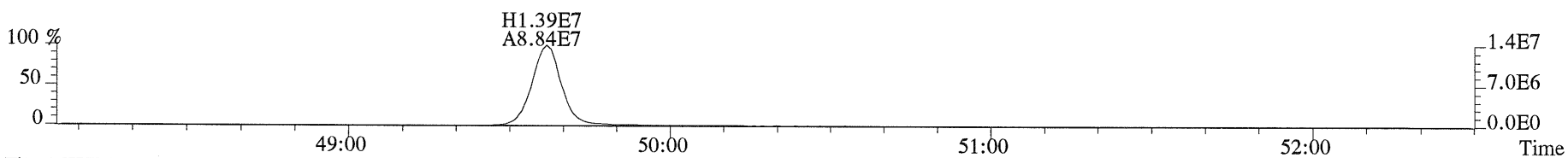
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



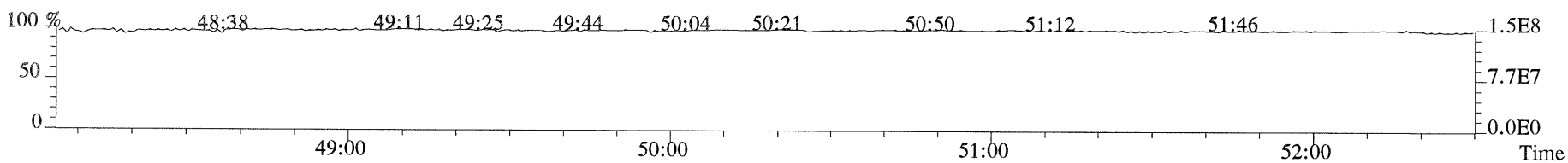
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



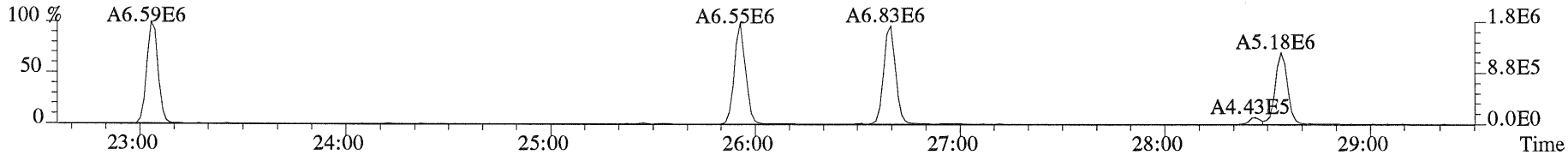
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



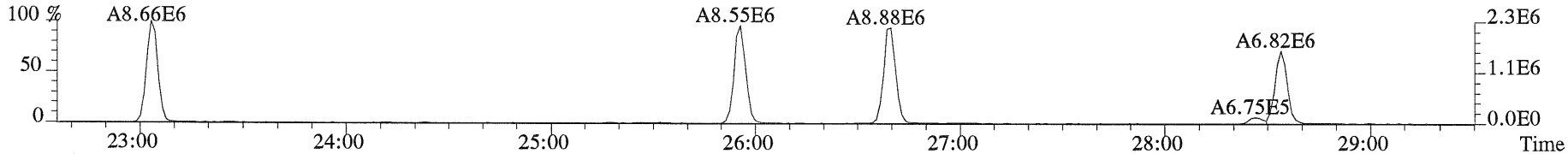
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD



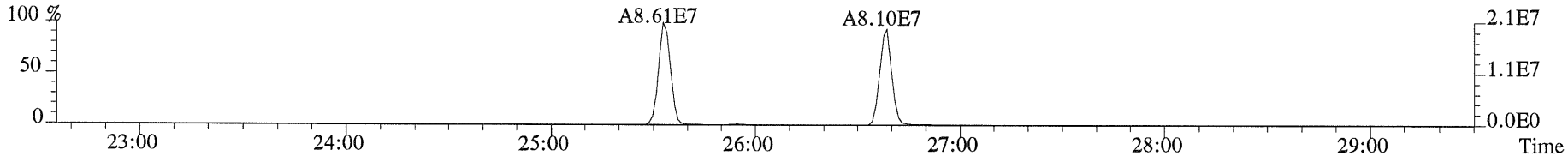
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



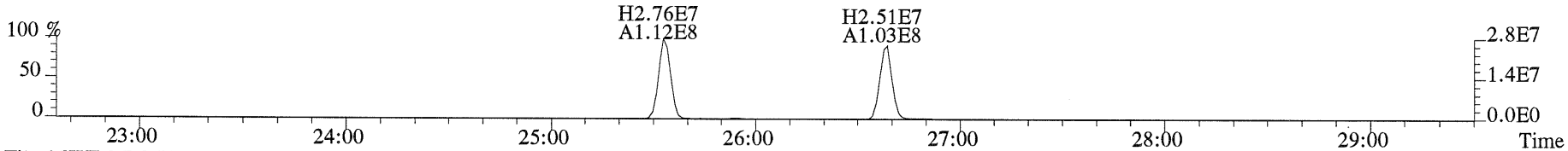
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



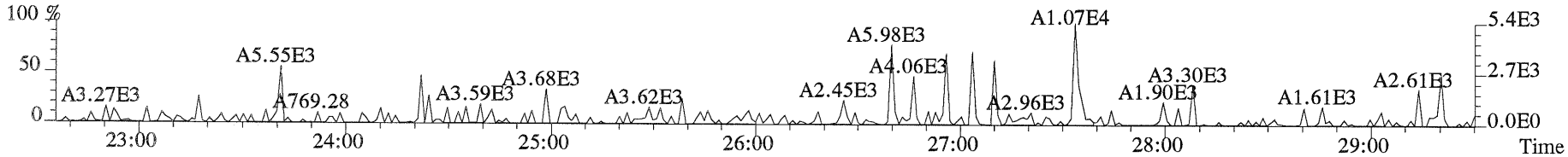
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



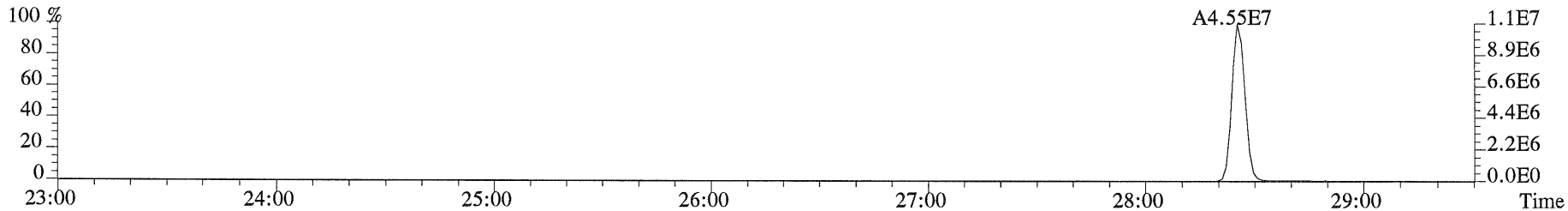
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



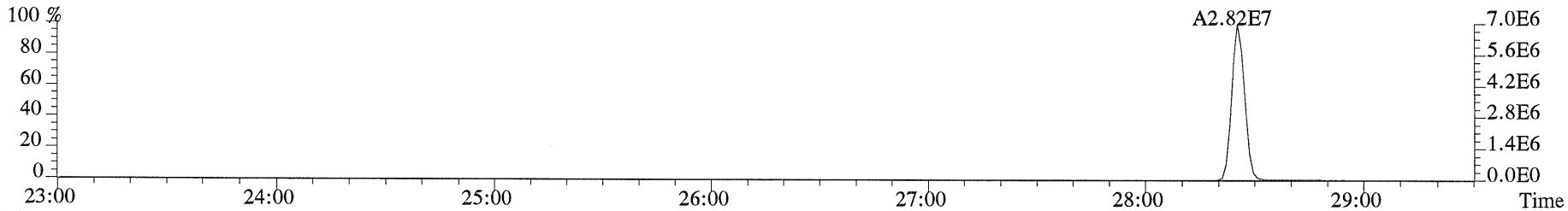
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



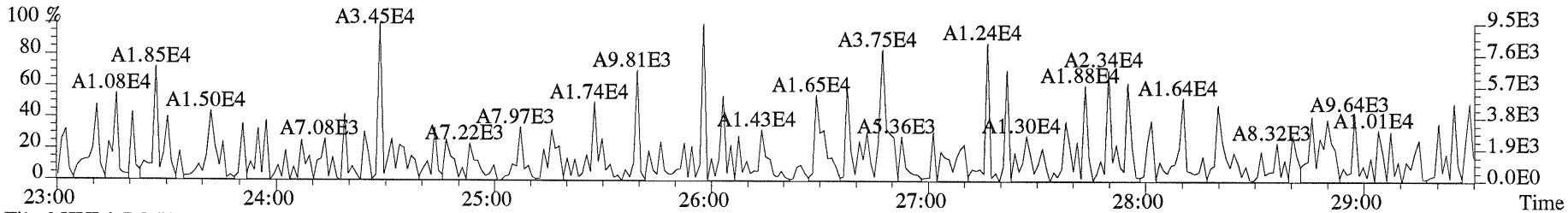
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



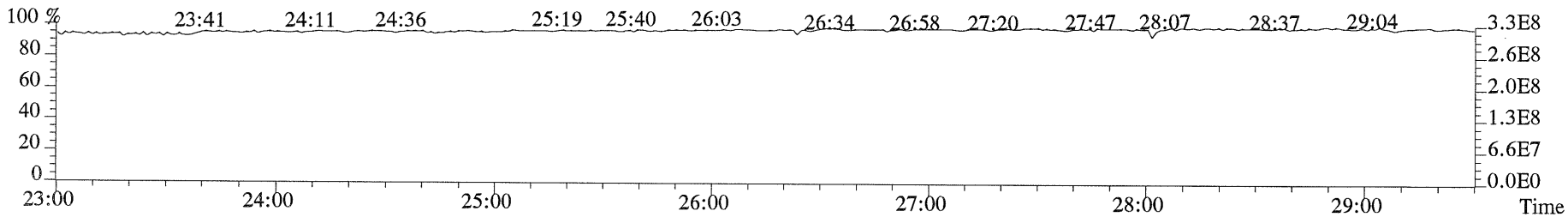
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



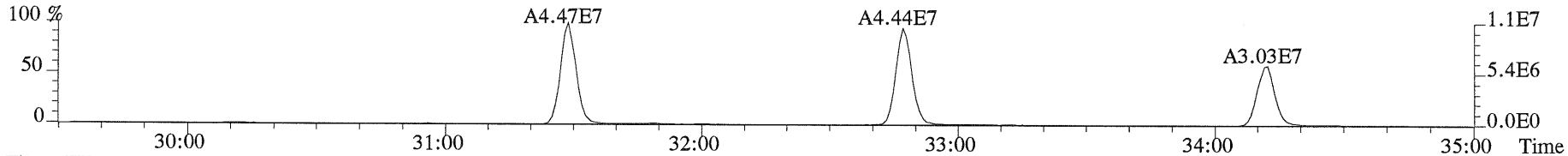
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



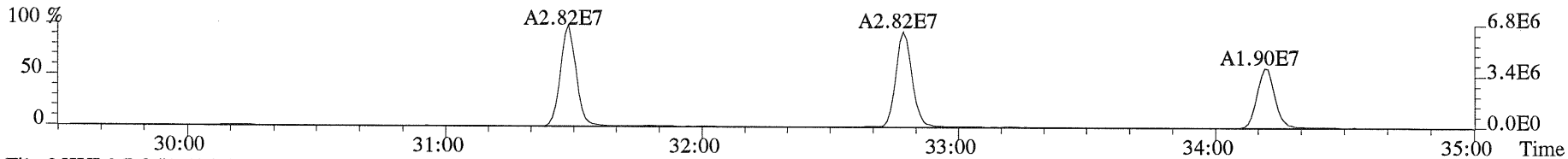
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD



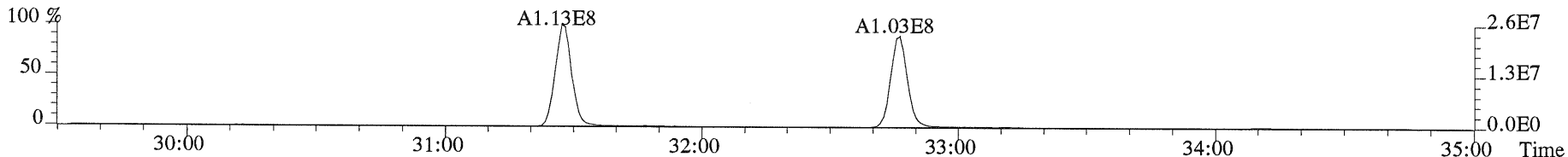
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



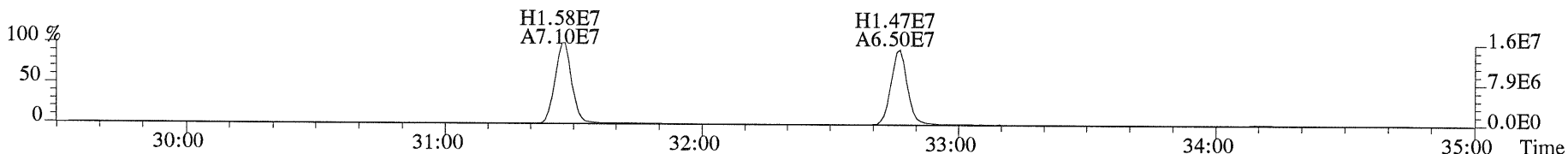
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



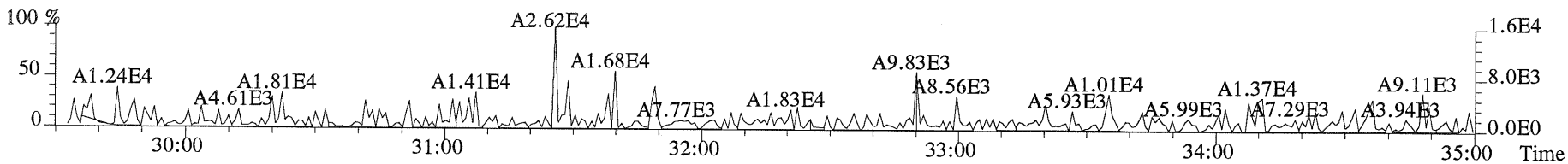
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



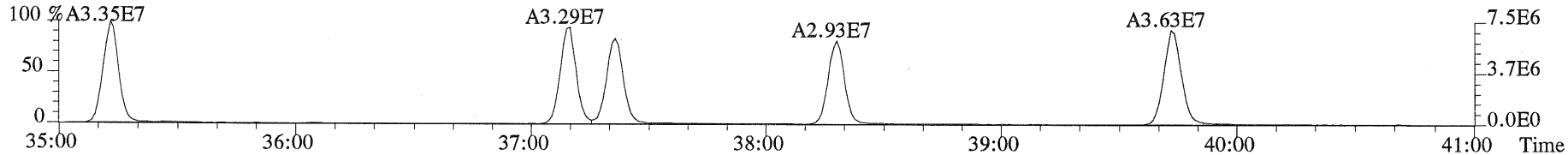
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



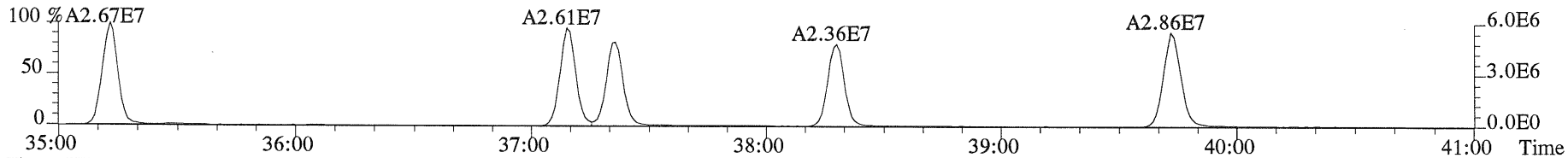
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



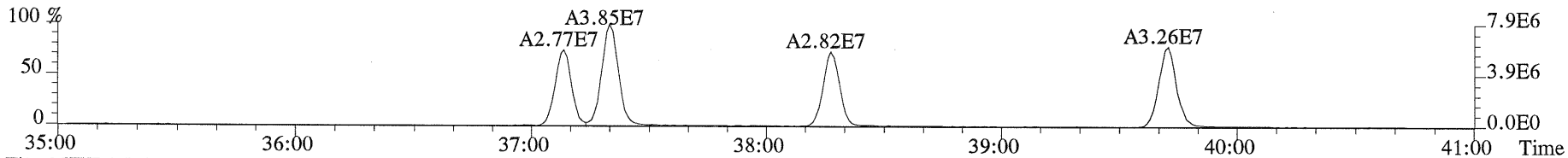
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



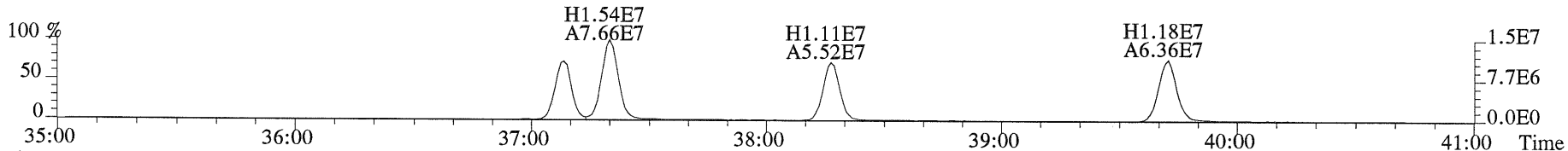
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



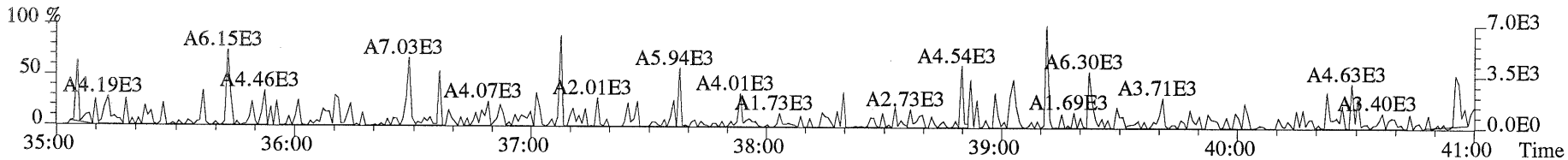
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



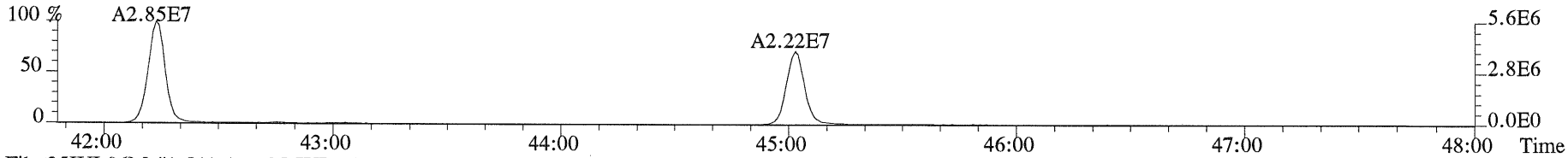
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



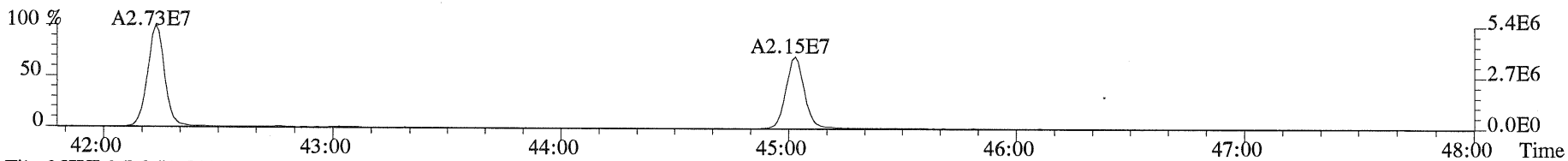
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



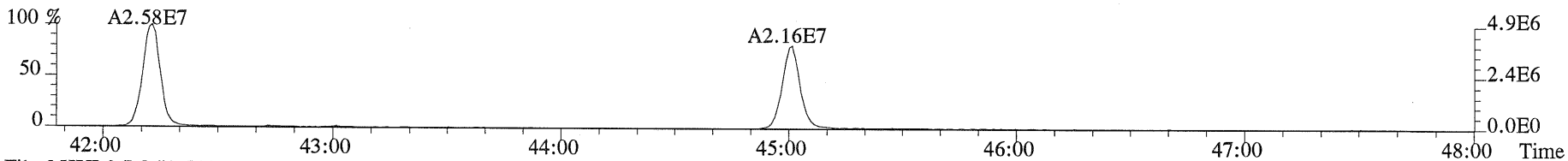
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



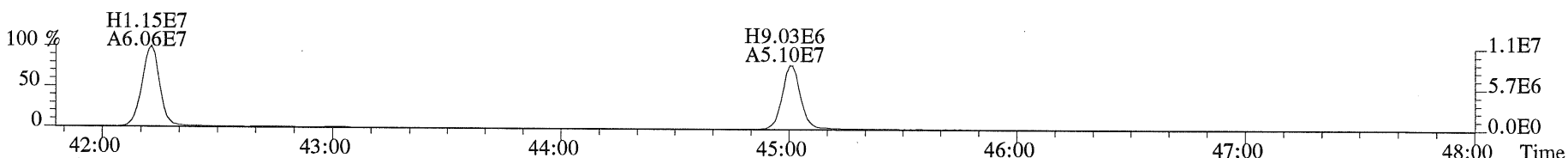
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



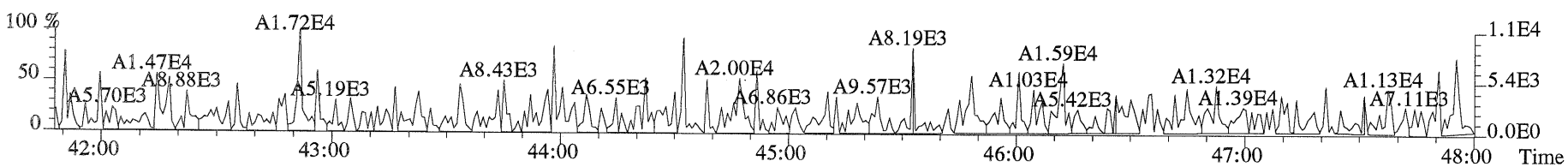
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



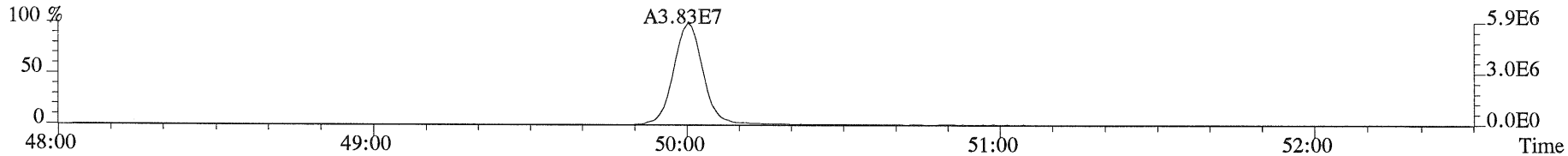
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



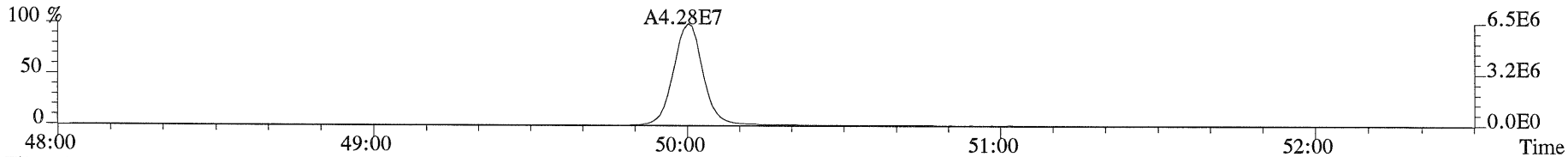
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



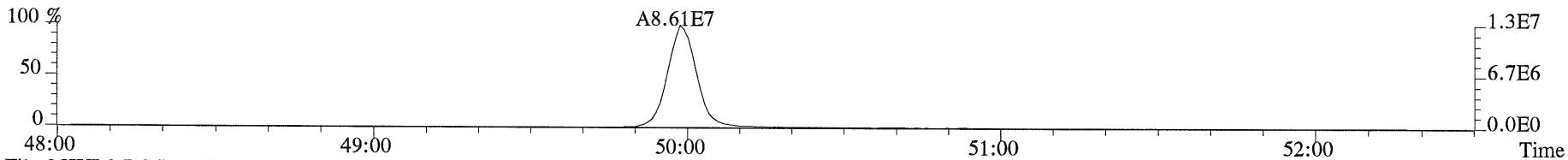
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



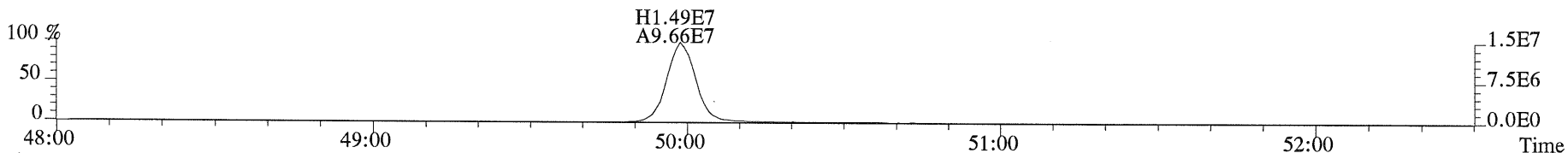
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



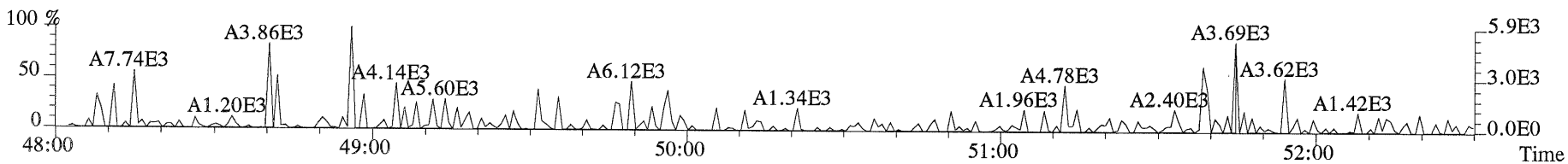
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



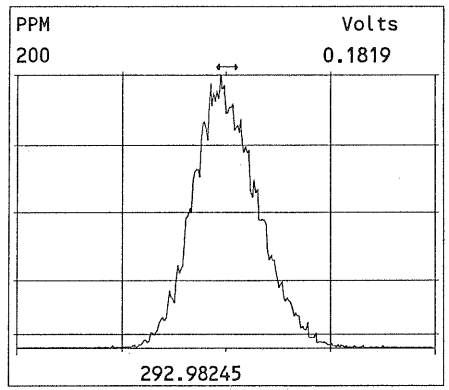
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD

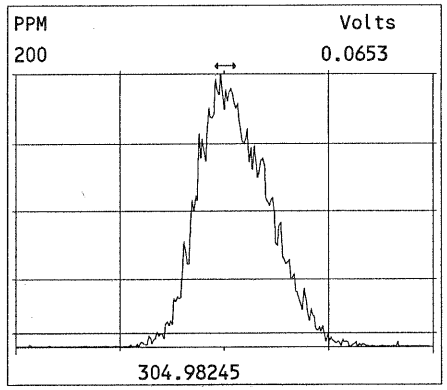


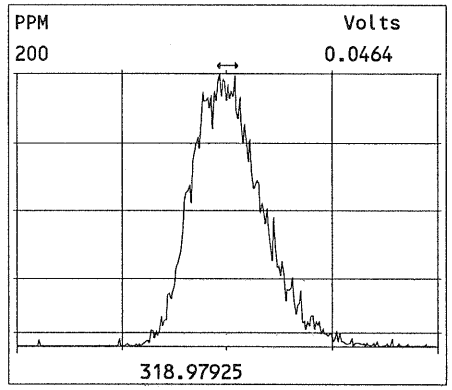
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD

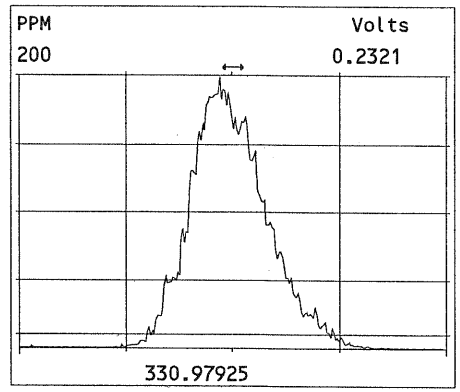


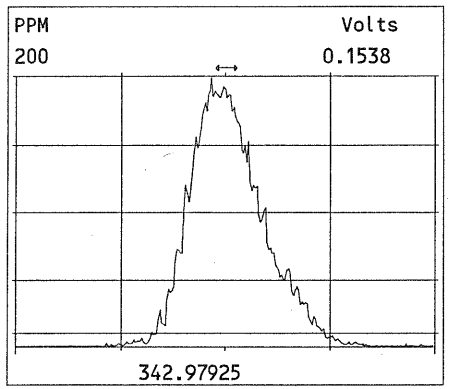
Peak Locate Examination:26-JUL-2006:10:12 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

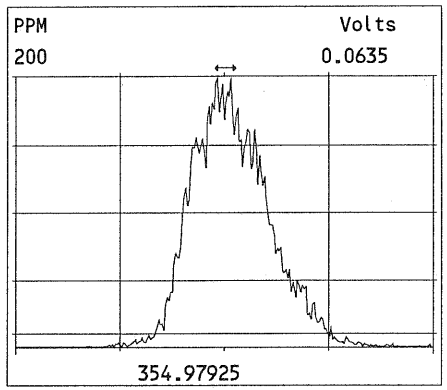


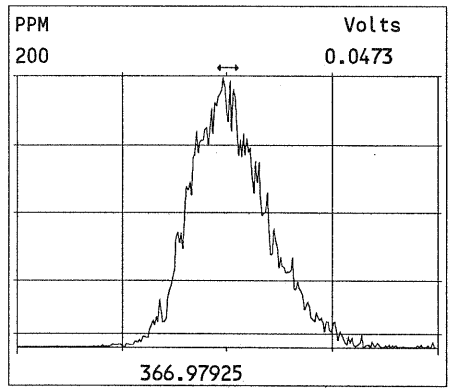


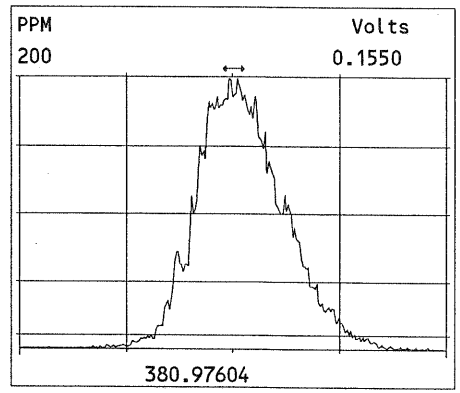


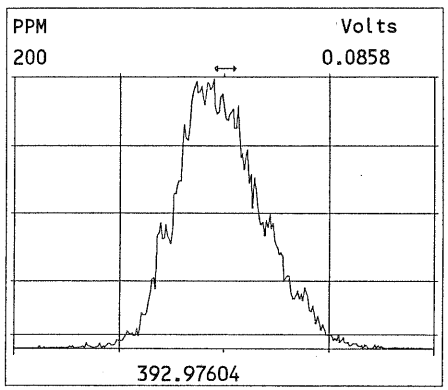


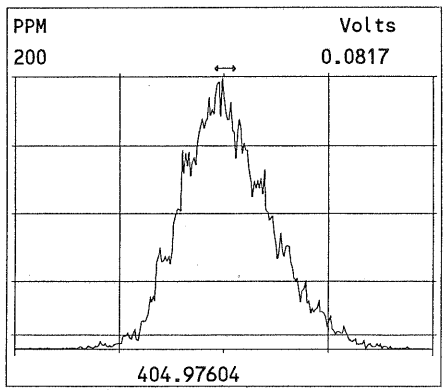


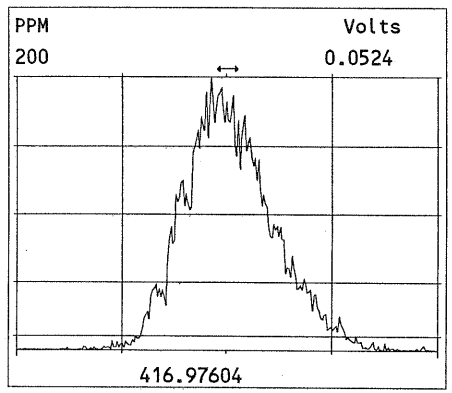




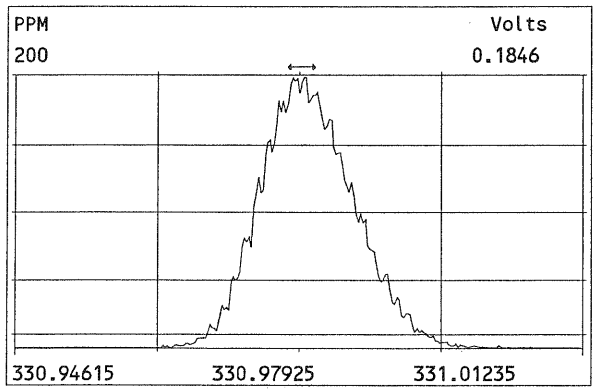


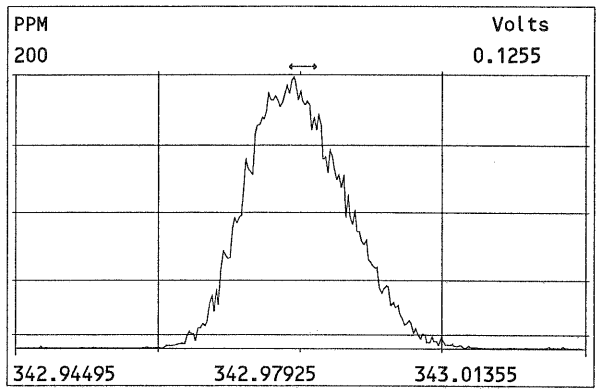


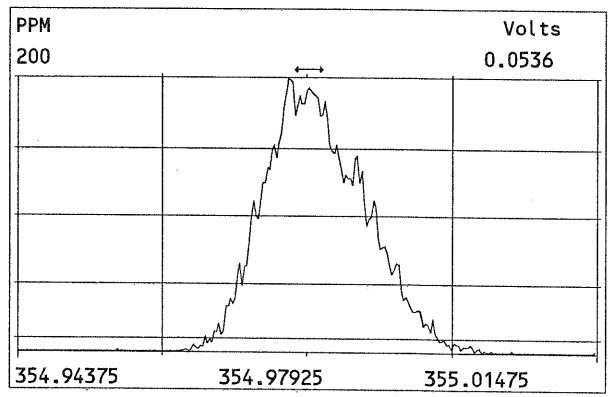


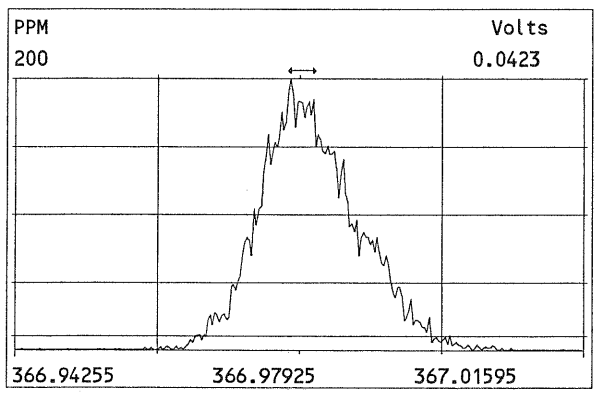


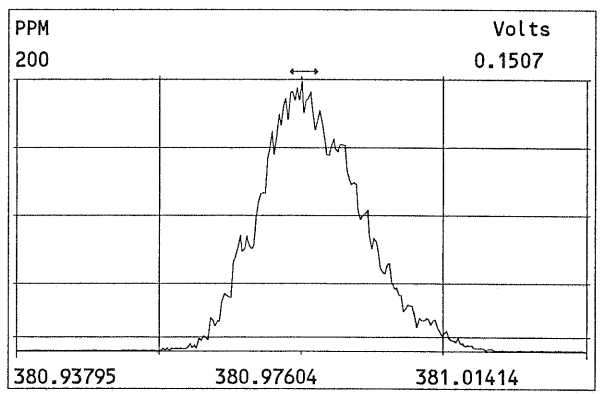
Peak Locate Examination:26-JUL-2006:10:14 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

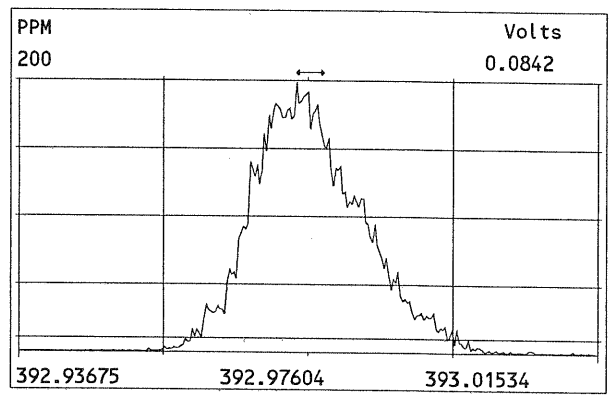


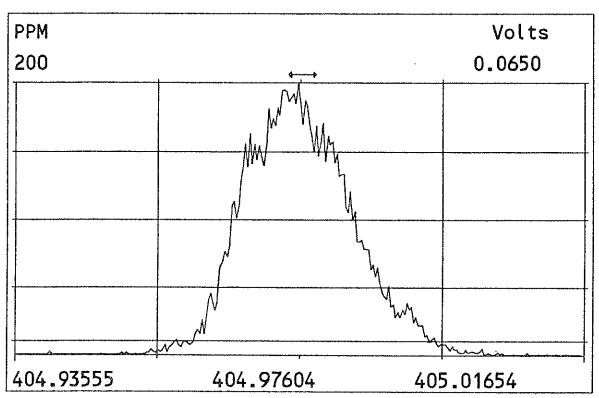


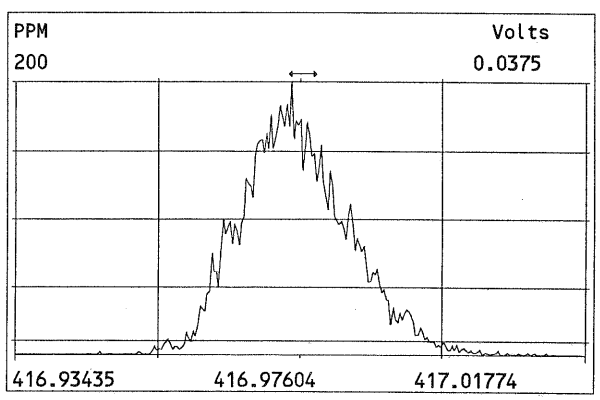




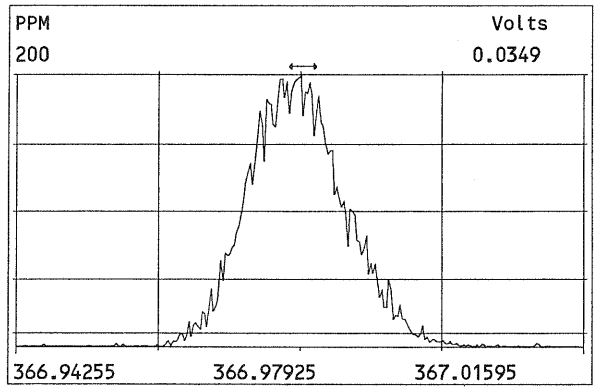


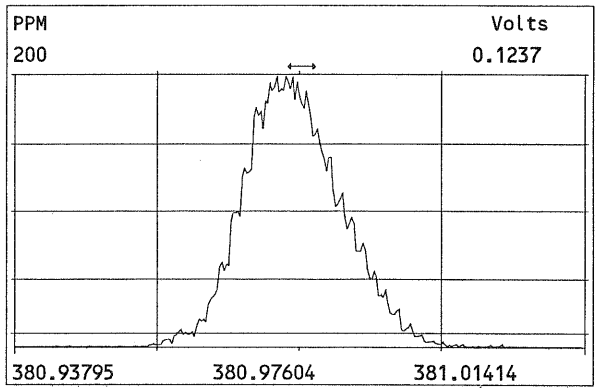


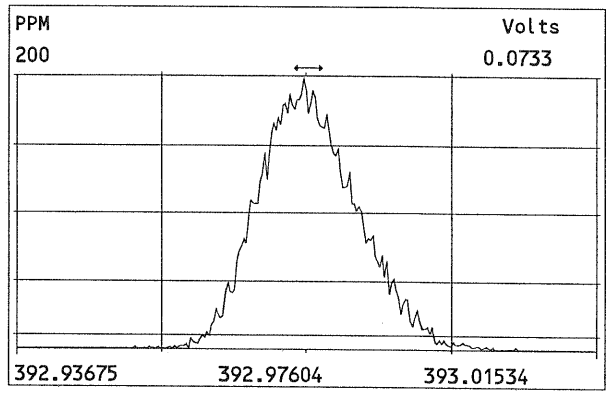


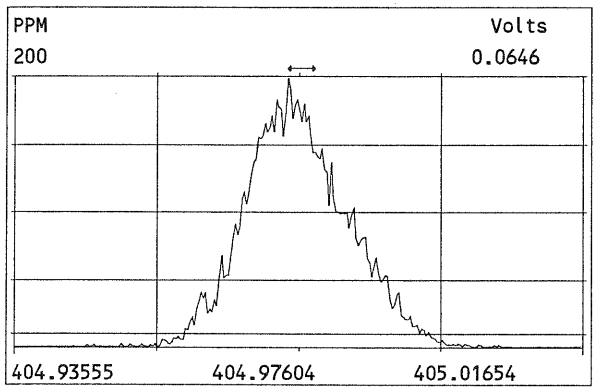


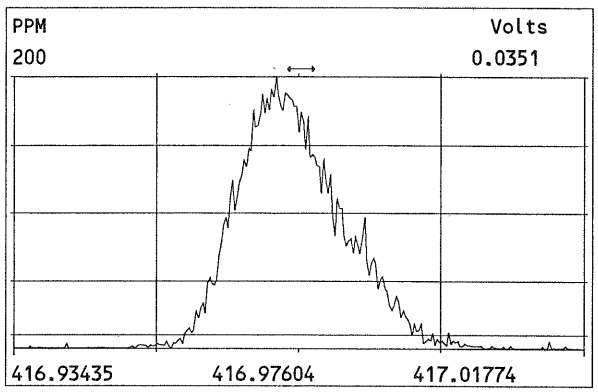
Peak Locate Examination:26-JUL-2006:10:16 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

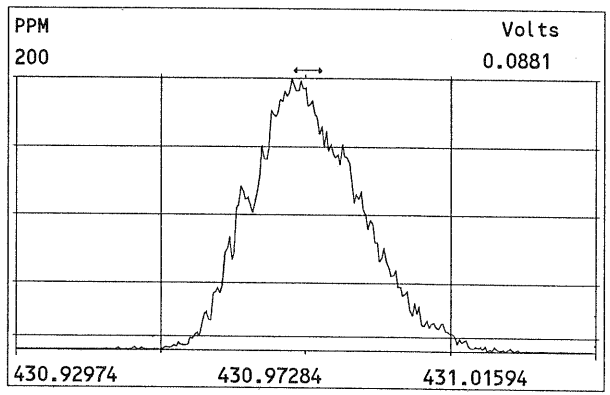


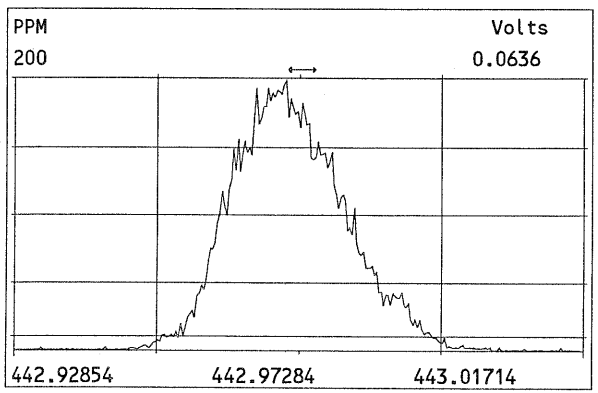


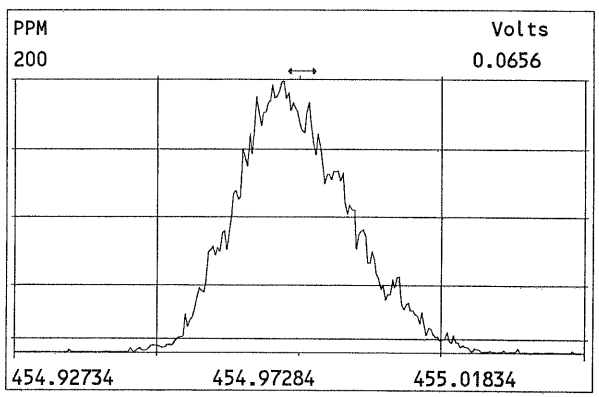












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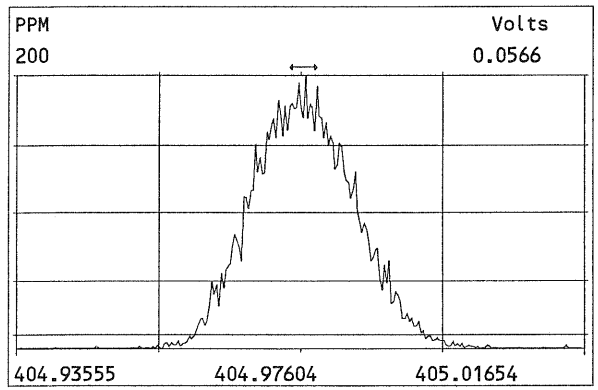
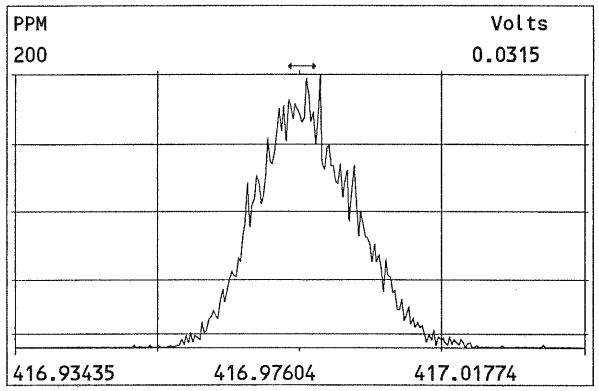
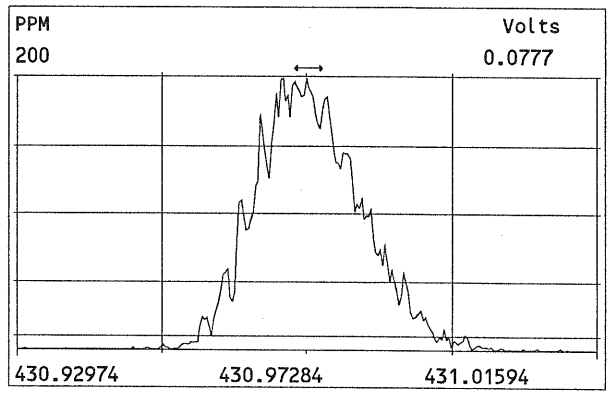
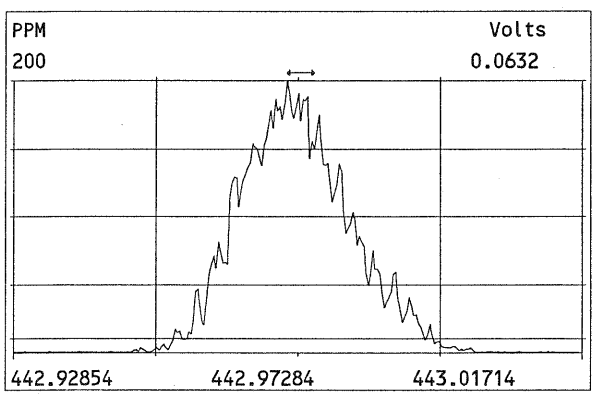
Peak Locate Examination:26-JUL-2006:10:18 File:25JUL06M_RES_CHECK

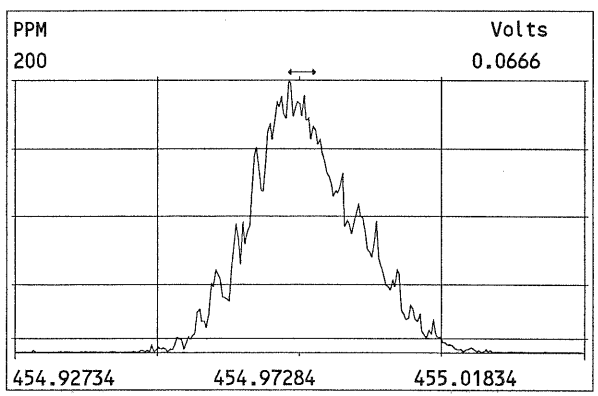
Experiment:PCDD Function:4 Reference:PFK

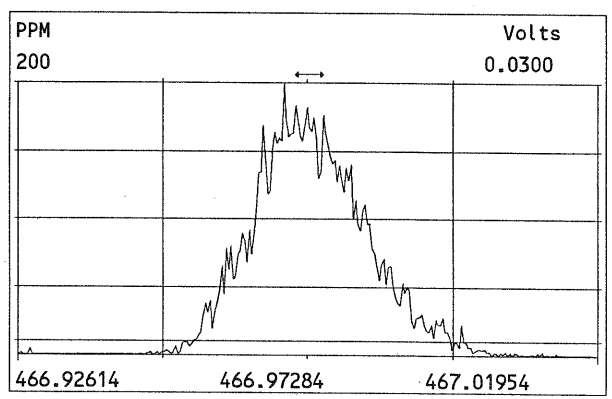


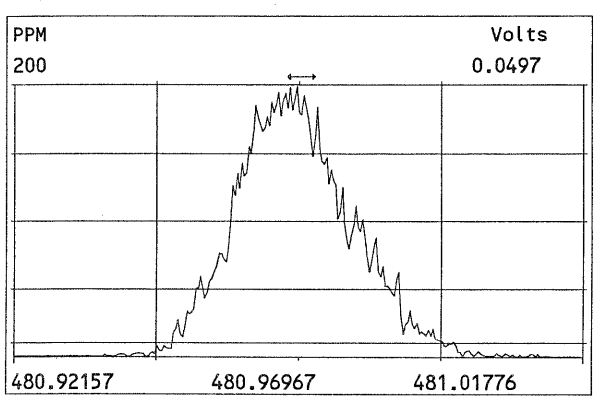




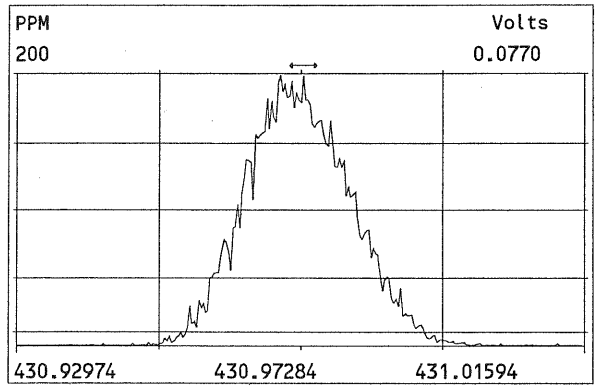


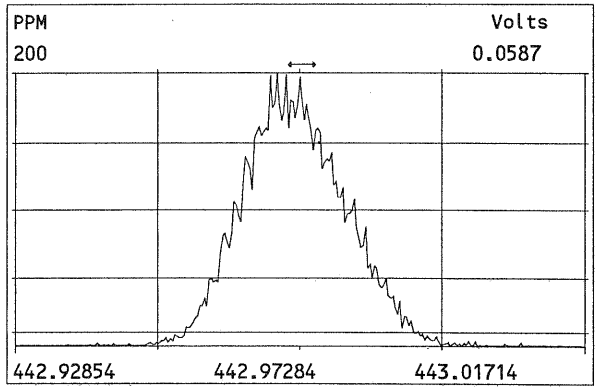


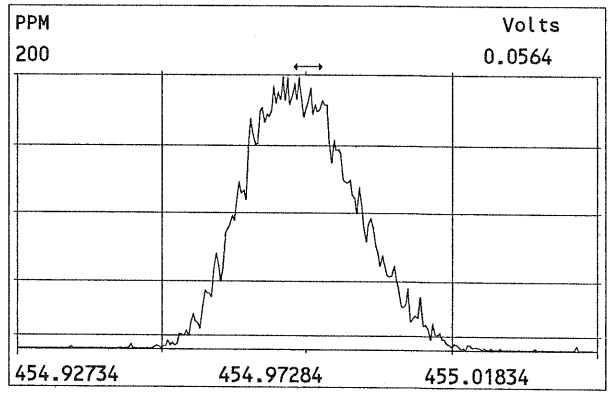


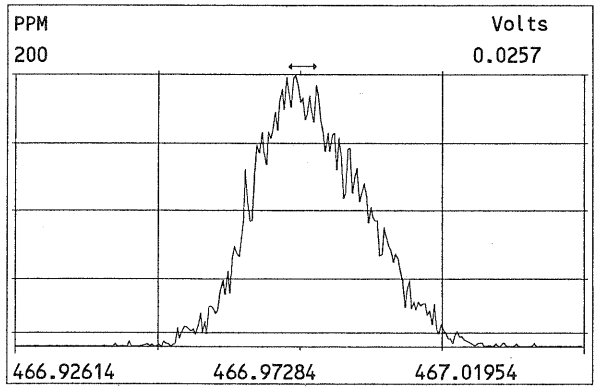


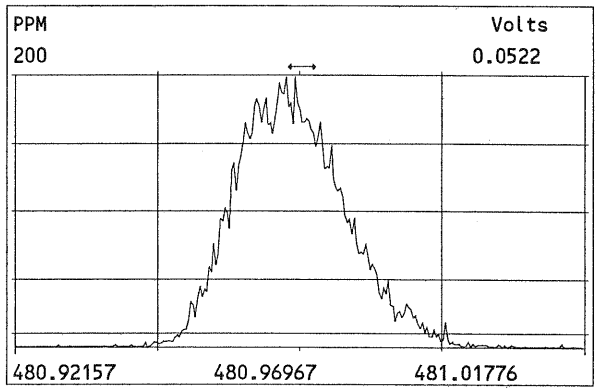
Peak Locate Examination:26-JUL-2006:10:20 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

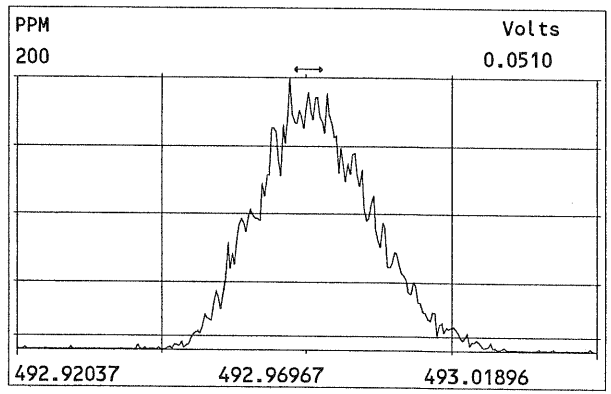


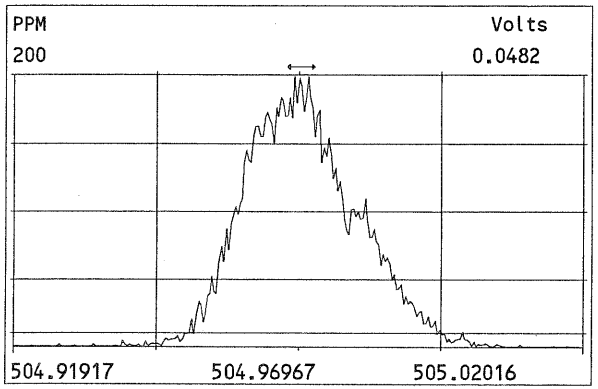


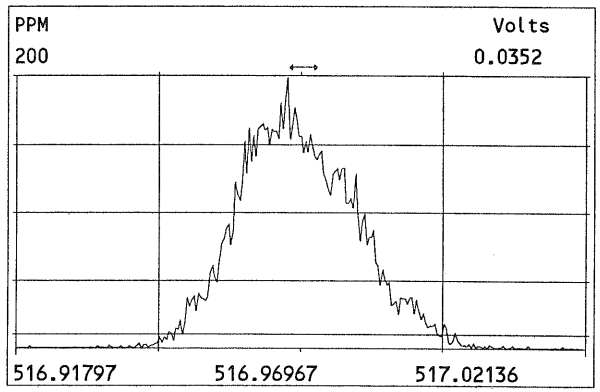












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 23:07:06

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	9.16	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	47.4	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	49.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	52.3	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.6	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	100	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	8.96	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.3	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	47.8	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.1	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.2	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	53.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.1	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	103	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 23:07:06

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	101	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32-1.78	y	89.5	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	95.4	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	95.4	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	110	72.0 - 138
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	228	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	101	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	92.0	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	89.3	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.5	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	90.6	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.0	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	96.6	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	101	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	111	77.0 - 129
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	223	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.60	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/26/06

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 Time: 23:07:06

DB-5 IS Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 Time: 23:07:06

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:25	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:14	1,3,4,6,8-PeCDF (F)	28:25
1,2,3,8,9-PeCDD (L)	33:46	1,2,3,8,9-PeCDF (L)	34:12
1,2,4,6,7,9-HxCDD (F)	36:06	1,2,3,4,6,8-HxCDF (F)	35:13
1,2,3,7,8,9-HxCDD (L)	39:10	1,2,3,7,8,9-HxCDF (L)	39:44
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:14
1,2,3,4,6,7,8-HpCDD (L)	44:08	1,2,3,4,7,8,9-HpCDF (L)	45:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 23:07:06 CS3 or VER Data Filename: 25JUL06M Sam:10

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.237	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.223	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 23:07:06 CS3 or VER Data Filename: 25JUL06M Sam:10

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 7/26/06

FAL ID: ST072506M2 Filename: 25JUL06M Sam:10 Acquired: 25-JUL-06 23:07:06 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072506M1 EndCal: ST072506M2
Results: 3969-2X GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.1
WHO 1998 Tox: 121

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.37e+07	0.76 y	27:25	1.10	9.16		2.50	-	*	
1,2,3,7,8-PeCDD	4.95e+07	1.56 y	33:12	0.90	47.4		2.50	-	*	
1,2,3,4,7,8-HxCDD	3.60e+07	1.25 y	38:33	0.96	49.9		2.50	-	*	
1,2,3,6,7,8-HxCDD	3.72e+07	1.24 y	38:42	0.83	49.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.36e+07	1.23 y	39:10	0.77	52.3		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	4.00e+07	1.04 y	44:08	0.86	50.6		2.50	-	*	
OCDD	6.18e+07	0.91 y	49:40	0.87	100		2.50	-	*	
2,3,7,8-TCDF	1.56e+07	0.76 y	26:40	0.99	8.96		2.50	-	*	
1,2,3,7,8-PeCDF	6.56e+07	1.56 y	31:29	0.80	48.3		2.50	-	*	
2,3,4,7,8-PeCDF	6.50e+07	1.56 y	32:47	0.88	47.8		2.50	-	*	
1,2,3,4,7,8-HxCDF	4.95e+07	1.25 y	37:09	1.42	50.1		2.50	-	*	
1,2,3,6,7,8-HxCDF	4.72e+07	1.24 y	37:22	0.97	50.1		2.50	-	*	
2,3,4,6,7,8-HxCDF	4.50e+07	1.23 y	38:18	1.26	50.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	5.56e+07	1.25 y	39:44	1.34	50.2		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.18e+07	1.04 y	42:14	1.28	53.1		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.28e+07	1.04 y	45:03	1.22	52.1		2.50	-	*	
OCDF	7.39e+07	0.92 y	50:02	0.90	103		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.36e+08	0.79 y	27:23	1.00	101					101
13C-1,2,3,7,8-PeCDD	1.16e+08	1.57 y	33:10	0.96	89.5					89.5
13C-1,2,3,4,7,8-HxCDD	7.53e+07	1.26 y	38:32	0.90	95.4					95.4
13C-1,2,3,6,7,8-HxCDD	9.05e+07	1.27 y	38:42	1.09	95.4					95.4
13C-1,2,3,4,6,7,8-HpCDD	9.20e+07	1.04 y	44:06	0.96	110					110
13C-OCDD	1.42e+08	0.90 y	49:39	0.71	228					114
13C-2,3,7,8-TCDF	1.75e+08	0.78 y	26:38	0.94	101					101
13C-1,2,3,7,8-PeCDF	1.70e+08	1.57 y	31:28	1.00	92.0					92.0
13C-2,3,4,7,8-PeCDF	1.55e+08	1.56 y	32:46	0.94	89.3					89.3
13C-1,2,3,4,7,8-HxCDF	6.95e+07	0.51 y	37:09	0.86	92.5					92.5
13C-1,2,3,6,7,8-HxCDF	9.72e+07	0.51 y	37:20	1.23	90.6					90.6
13C-2,3,4,6,7,8-HxCDF	7.10e+07	0.51 y	38:17	0.88	92.0					92.0
13C-1,2,3,7,8,9-HxCDF	8.29e+07	0.51 y	39:43	0.98	96.6					96.6
13C-1,2,3,4,6,7,8-HpCDF	7.61e+07	0.45 y	42:13	0.86	101					101
13C-1,2,3,4,7,8,9-HpCDF	6.75e+07	0.44 y	45:01	0.70	111					111
13C-OCDF	1.59e+08	0.90 y	50:00	0.82	223					111
37Cl-2,3,7,8-TCDD	9.42e+06		27:25	0.81	8.60					86.0
13C-1,2,3,4-TCDD	1.35e+08	0.80 y	26:48	-	70.7					
13C-1,2,3,4-TCDF	1.84e+08	0.77 y	25:34	-	64.1					
13C-1,2,3,7,8,9-HxCDD	8.74e+07	1.29 y	39:09	-	58.5					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.69e+07		23:02	1.10	38.0		2.50	-	*	19
Total Penta-Dioxins	1.33e+08		30:14	0.90	127		2.50	-	*	13
Total Hexa-Dioxins	1.48e+08		36:06	0.85	211		2.50	-	*	26
Total Hepta-Dioxins	7.58e+07		42:46	0.86	95.7		2.50	-	*	21
Total Tetra-Furans	5.96e+07		23:04	0.99	34.3		2.50	-	*	21
1st Fn. Tot Penta-Furans	7.41e+07		28:25	0.84	54.5		2.50	-	*	1 PeCDF
Total Penta-Furans	1.78e+08		30:11	0.84	131		2.50	-	*	15 186
Total Hexa-Furans	2.50e+08		35:13	1.22	254		2.50	-	*	14
Total Hepta-Furans	9.69e+07		42:14	1.25	108		2.50	-	*	23

Analyst: _____ Date: 7/26/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:25JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
25JUL06M	1	ST072506M1	1613 CS3 (051212J)	25-JUL-06 14:41:35	ST072506M1	ST072506M2	DV
25JUL06M	2	3969-006-0001-SA	E2-B4-EP162-182	25-JUL-06 15:44:16	ST072506M1	ST072506M2	DV
25JUL06M	3	3969-009-0001-SA	E1-B1-EP85-164	25-JUL-06 16:39:41	ST072506M1	ST072506M2	DV
25JUL06M	4	SB072506M1	Solvent Blank	25-JUL-06 17:35:04	ST072506M1	ST072506M2	DV
25JUL06M	5	0913-001-0001-OPR	OPR	25-JUL-06 18:30:25	ST072506M1	ST072506M2	DV
25JUL06M	6	0913-001-0001-MB	Method Blank	25-JUL-06 19:25:45	ST072506M1	ST072506M2	DV
25JUL06M	7	3969-004-X002-SA	E8-162-T-C7@15	25-JUL-06 20:21:04	ST072506M1	ST072506M2	DV
25JUL06M	8	3969-002-X002-SA	E3-A4-EP168-181	25-JUL-06 21:16:24	ST072506M1	ST072506M2	DV
25JUL06M	9	SB072506M2	Solvent Blank	25-JUL-06 22:11:47	ST072506M1	ST072506M2	DV
25JUL06M	10	ST072506M2	1613 CS3 (051212J)	25-JUL-06 23:07:06	ST072506M1	ST072506M2	DV
25JUL06M	11	3956-001-0001-SA	IG7-S1	26-JUL-06 00:02:34	ST072506M2	ST072506M3	DV
25JUL06M	12	3963-001-0001-SA	061409-08	26-JUL-06 00:58:02	ST072506M2	ST072506M3	DV
25JUL06M	13	3963-002-0001-SA	061409-09	26-JUL-06 01:53:21	ST072506M2	ST072506M3	DV
25JUL06M	14	3963-003-0001-SA	061409-10	26-JUL-06 02:48:37	ST072506M2	ST072506M3	DV
25JUL06M	15	3967-001-0001-SA	C-4, S-1	26-JUL-06 03:43:56	ST072506M2	ST072506M3	DV
25JUL06M	16	3968-001-0001-SA	STC-1	26-JUL-06 04:39:22	ST072506M2	ST072506M3	DV
25JUL06M	17	3968-002-0001-SA	STC-2	26-JUL-06 05:34:41	ST072506M2	ST072506M3	DV
25JUL06M	18	3968-003-0001-SA	STC-3	26-JUL-06 06:30:01	ST072506M2	ST072506M3	DV
25JUL06M	19	3968-004-0001-SA	STC-4	26-JUL-06 07:25:21	ST072506M2	ST072506M3	DV
25JUL06M	20	SB072506M3	Solvent Blank	26-JUL-06 08:20:42	ST072506M2	ST072506M3	DV
25JUL06M	21	ST072506M3	1613 CS3 (051212J)	26-JUL-06 09:16:01	ST072506M2	ST072506M3	DV

7/26/06

Data Backed Up:_____

Date:_____

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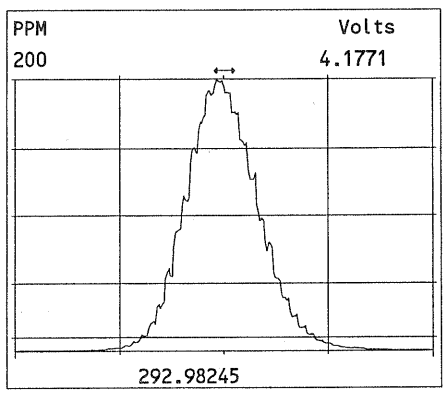
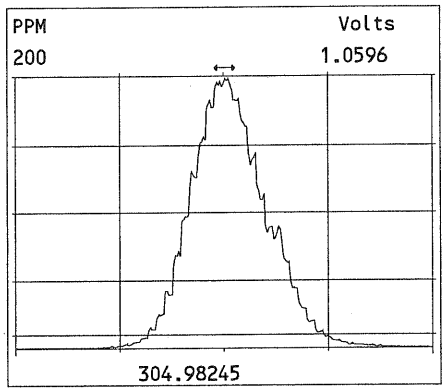
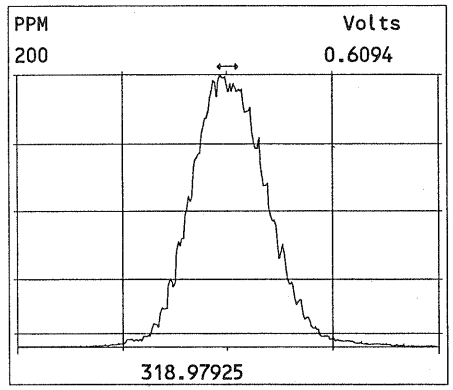
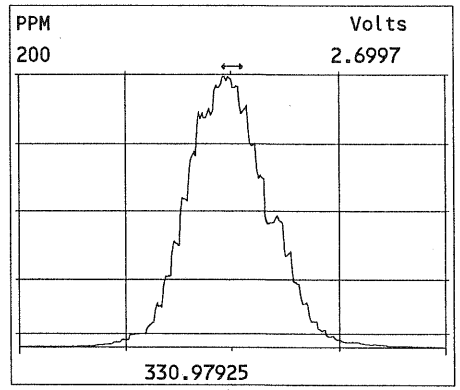
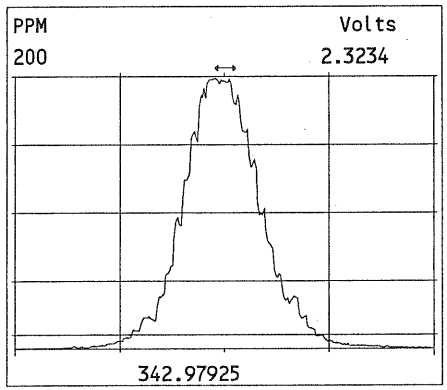
Peak Locate Examination:25-JUL-2006:14:39 File:25JUL06M
Experiment:PCDD Function:1 Reference:PFK

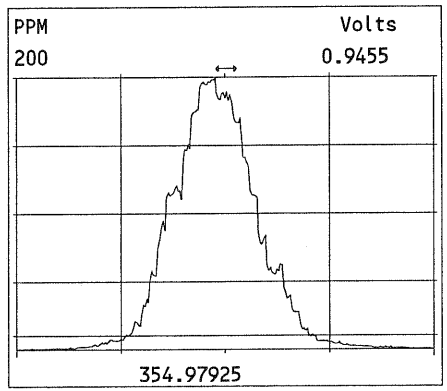


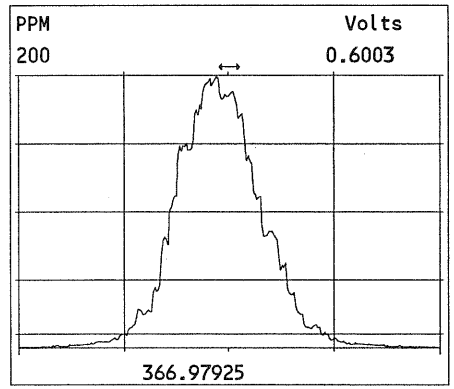


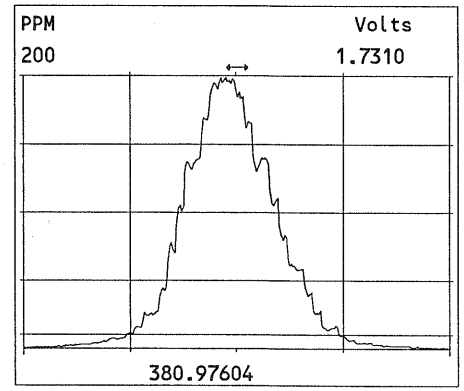


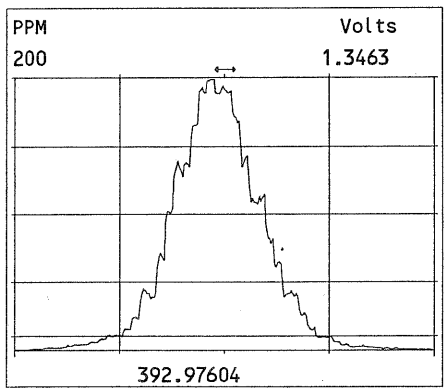


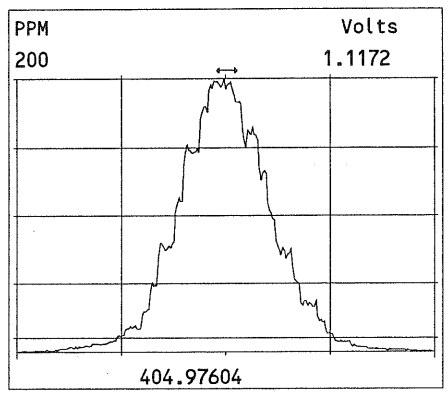


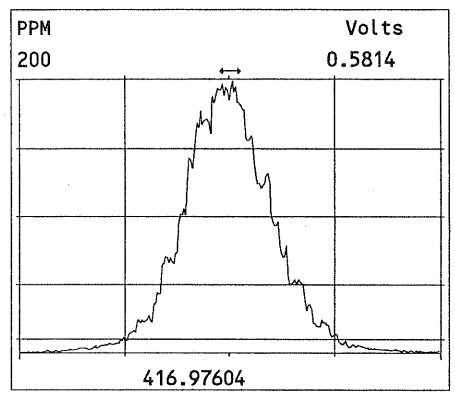




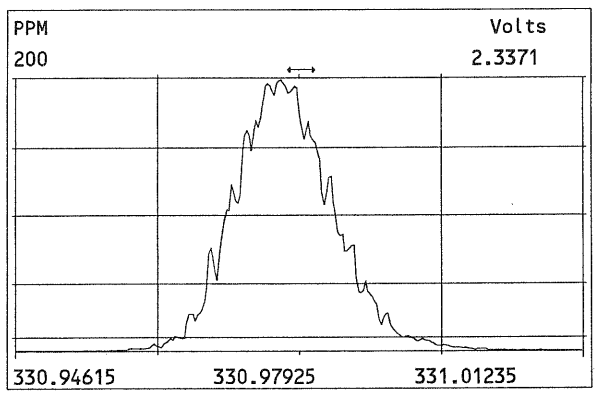


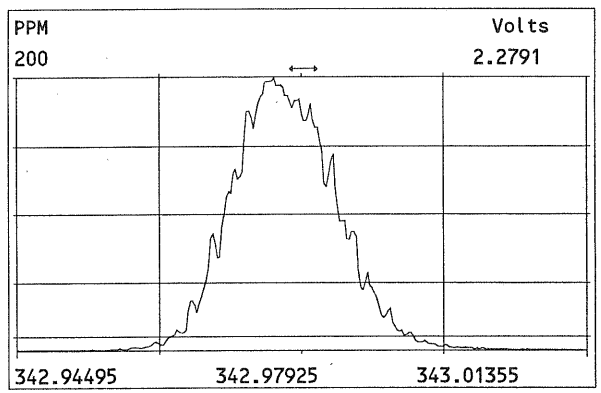


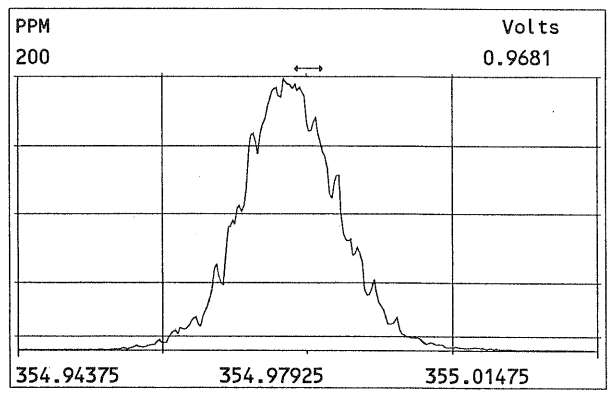


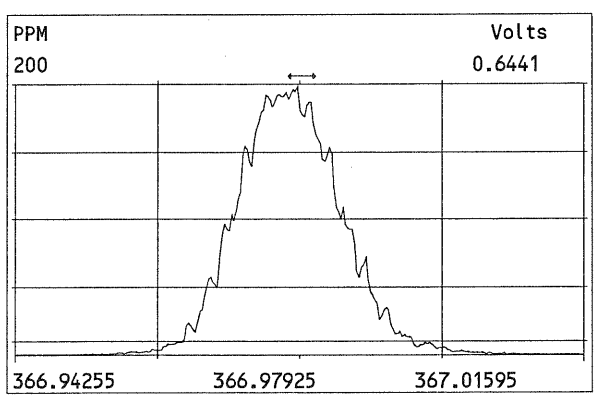


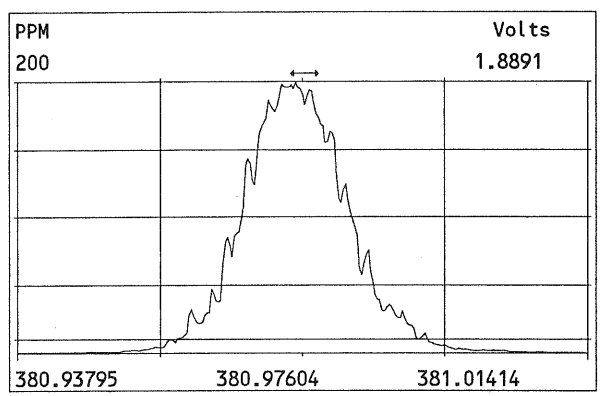
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:2 Reference:PFK

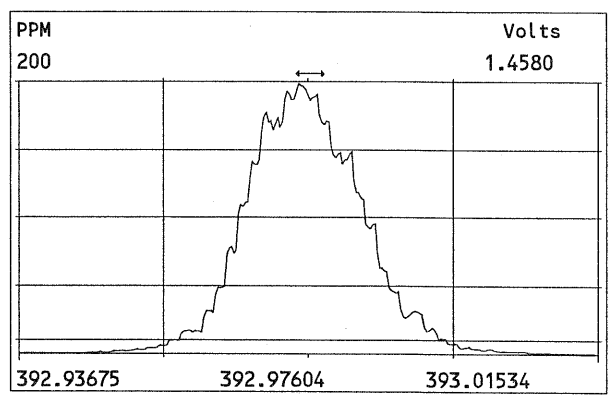


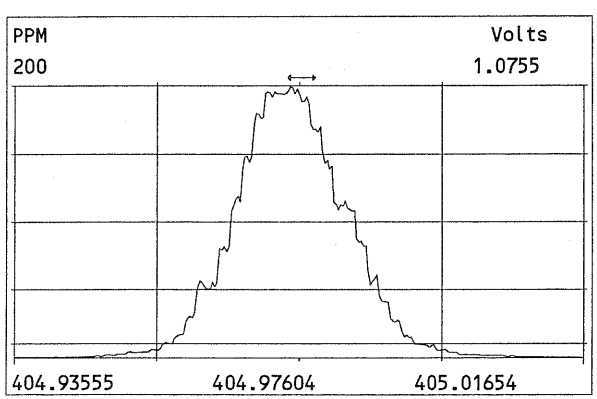


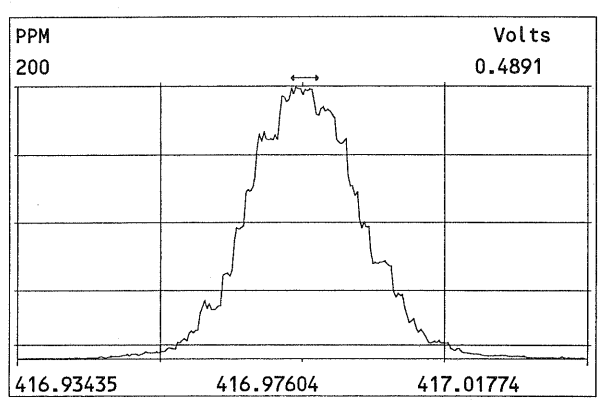












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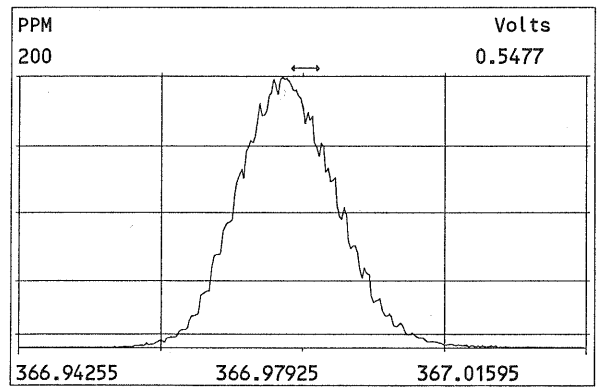
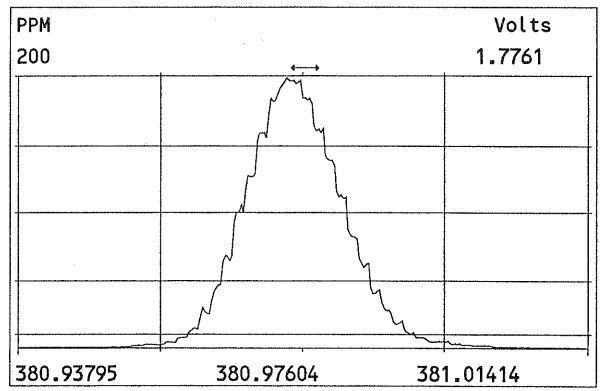
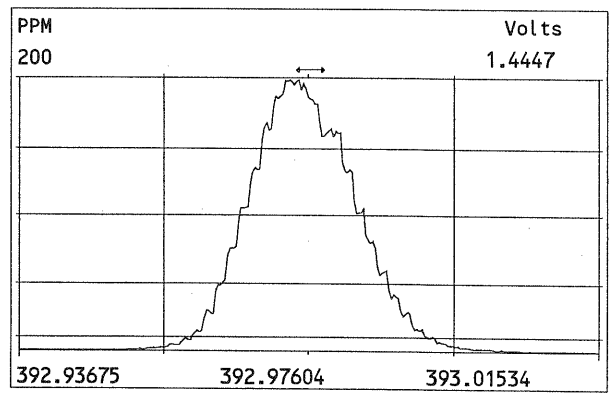
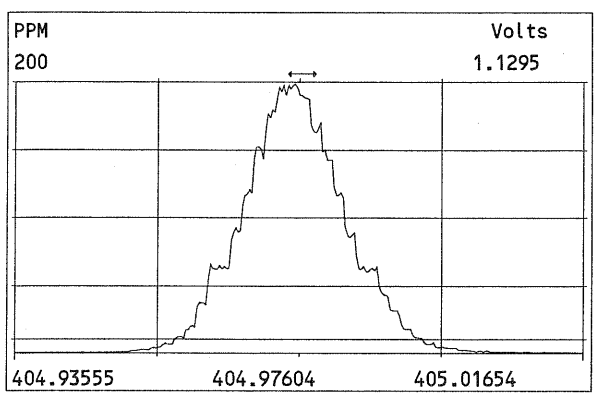
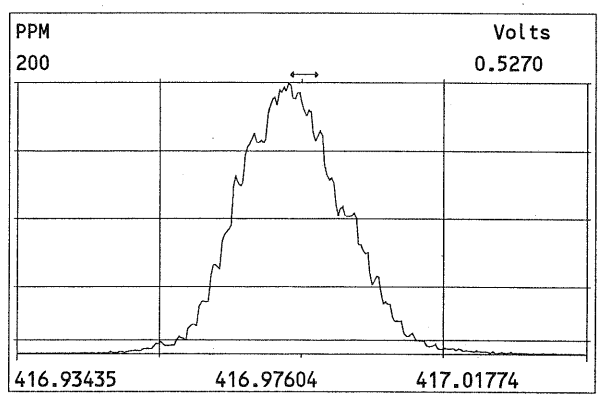
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:3 Reference:PFK

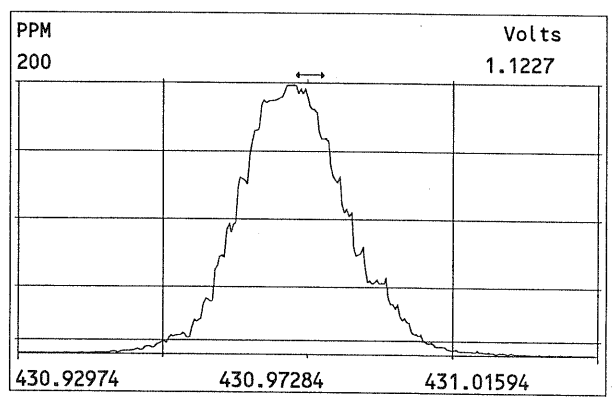


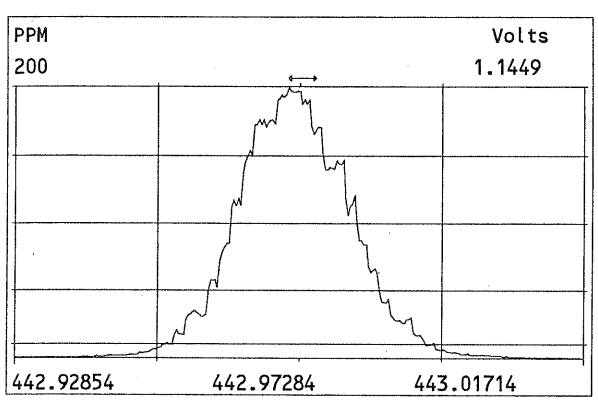


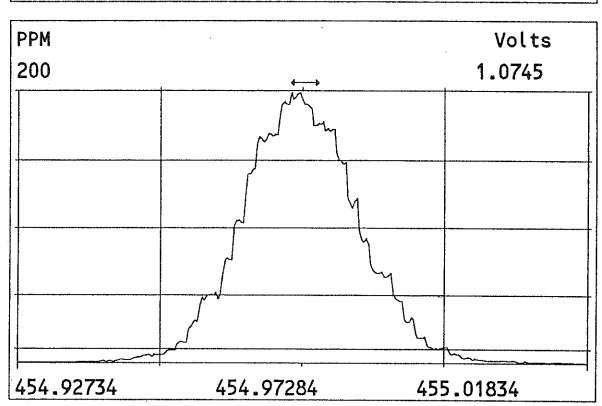




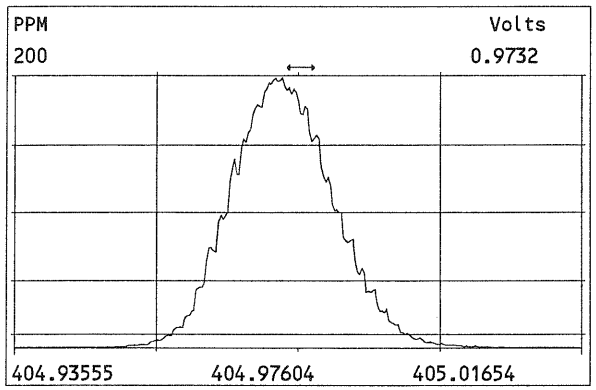


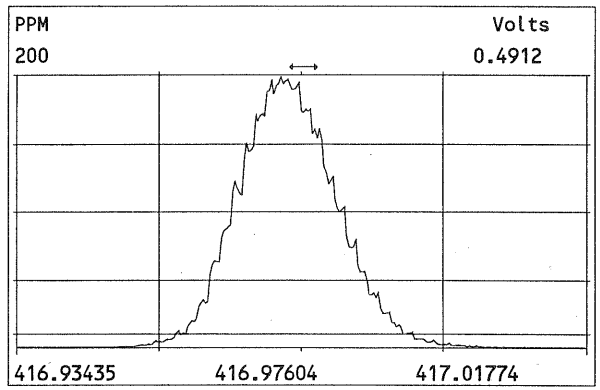


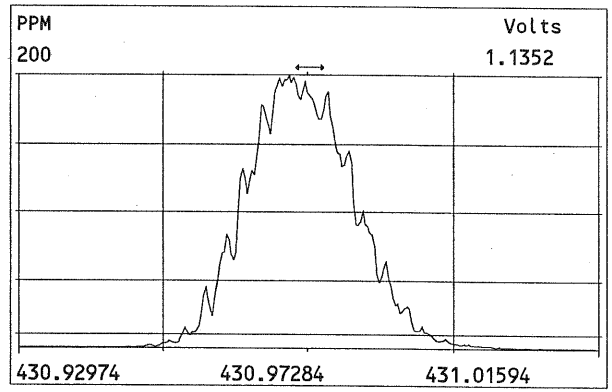


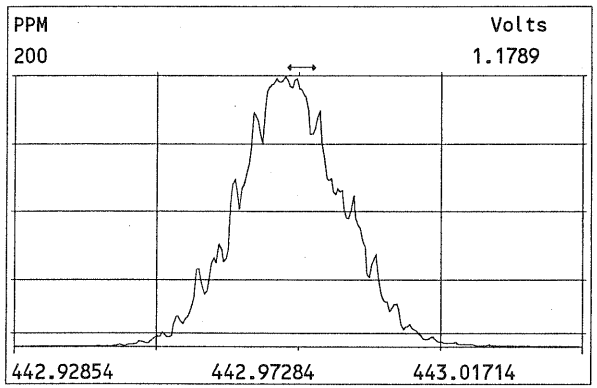


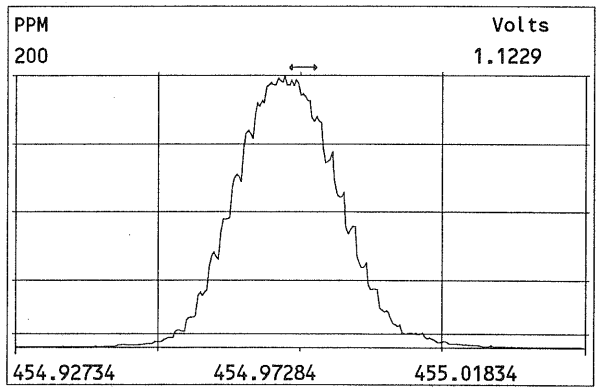
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:4 Reference:PFK

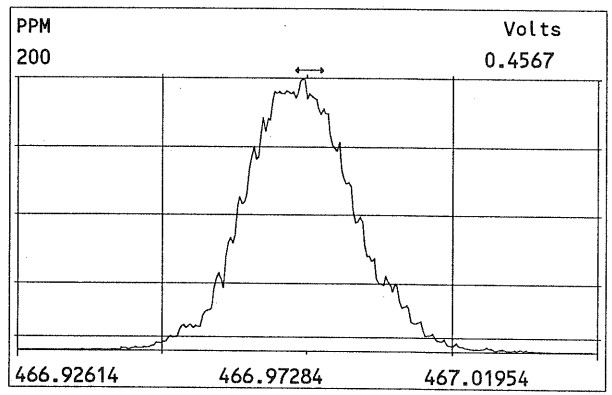


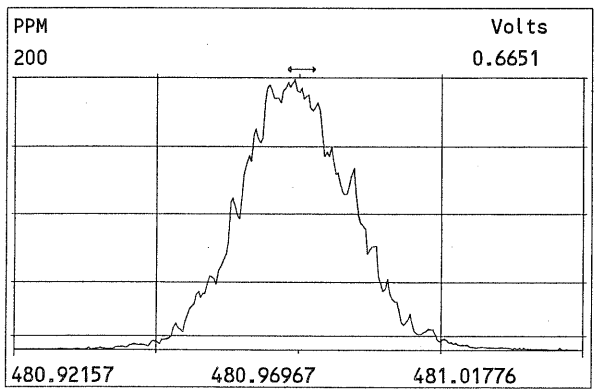




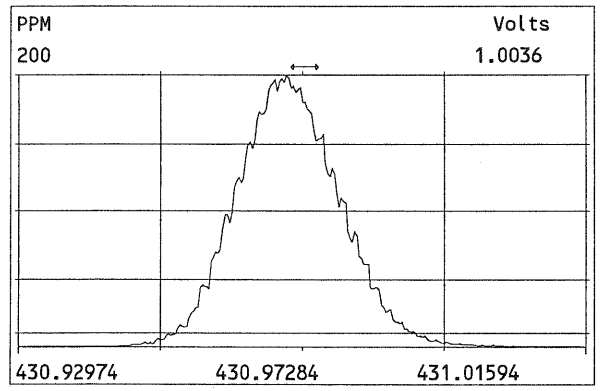


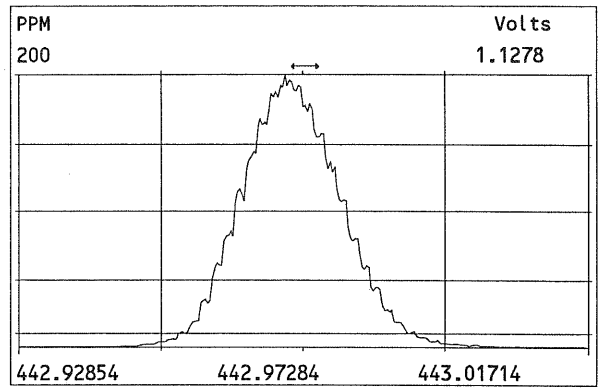


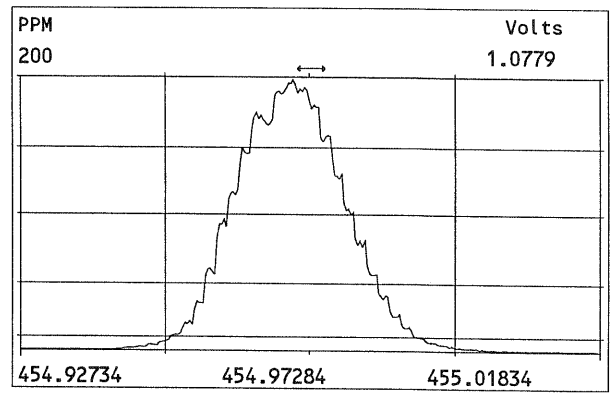


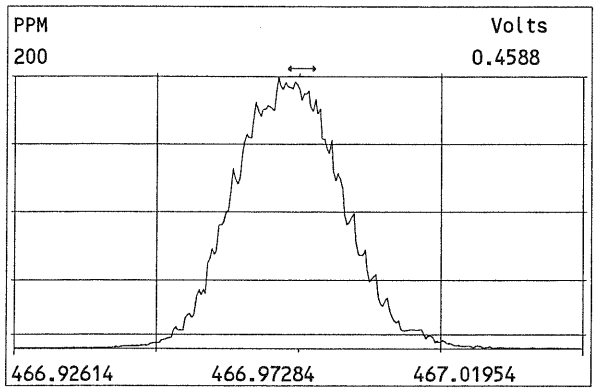


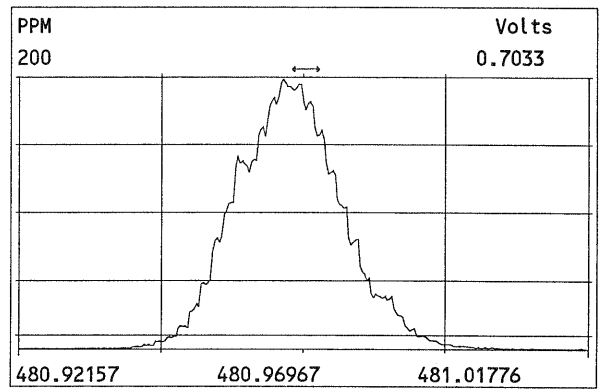
Peak Locate Examination:25-JUL-2006:14:41 File:25JUL06M
Experiment:PCDD Function:5 Reference:PFK

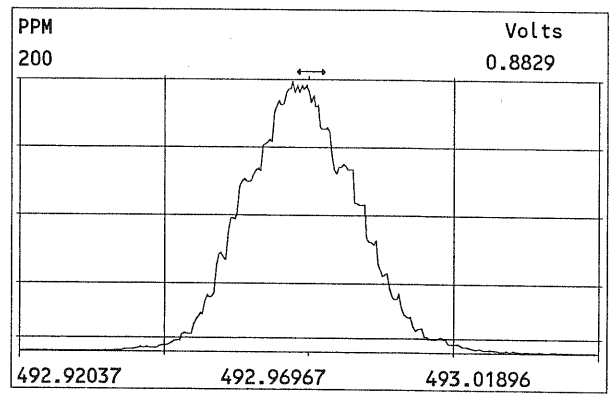


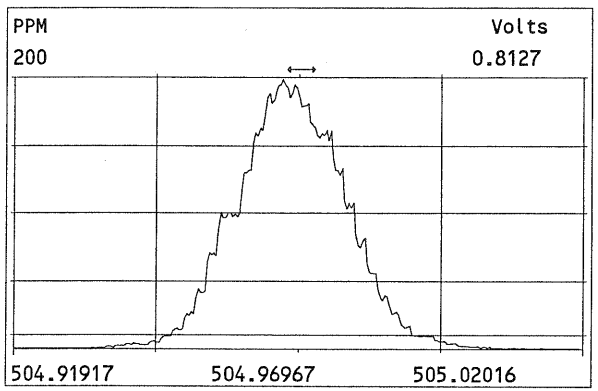


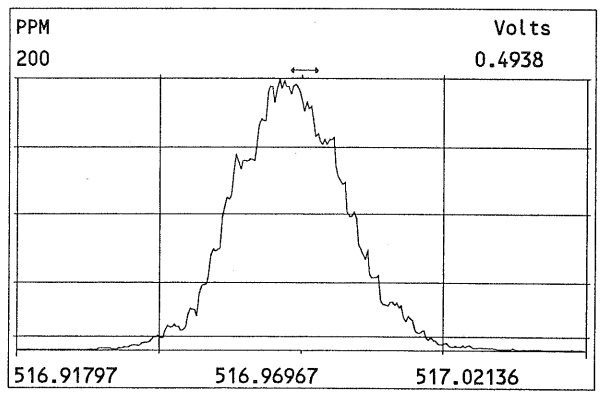




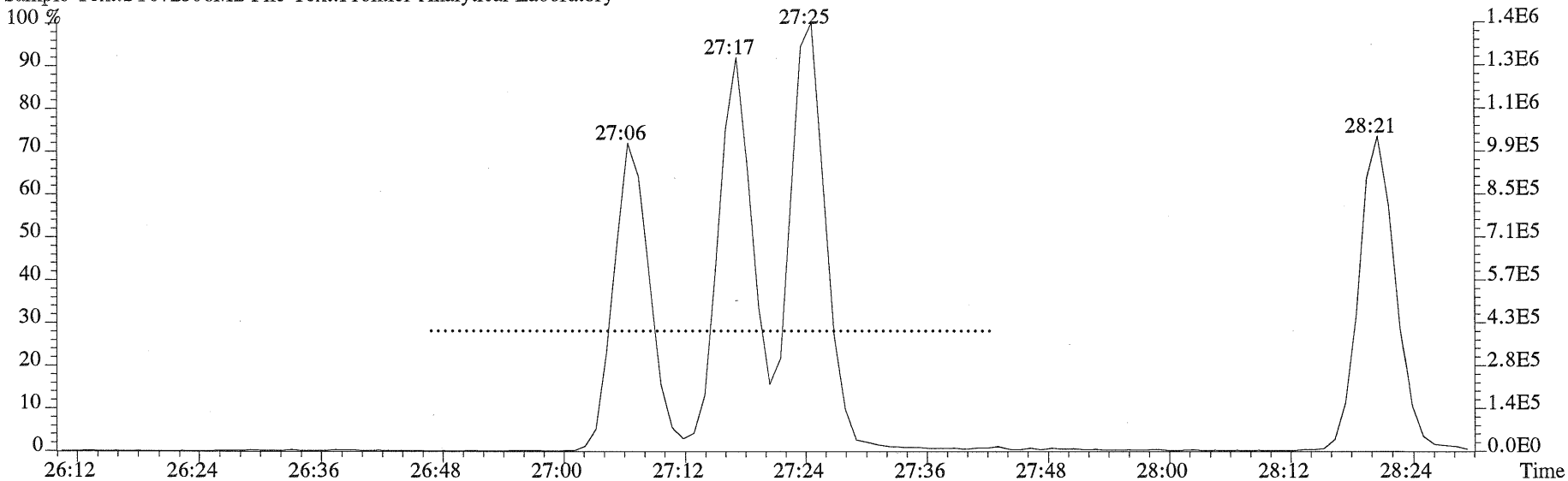




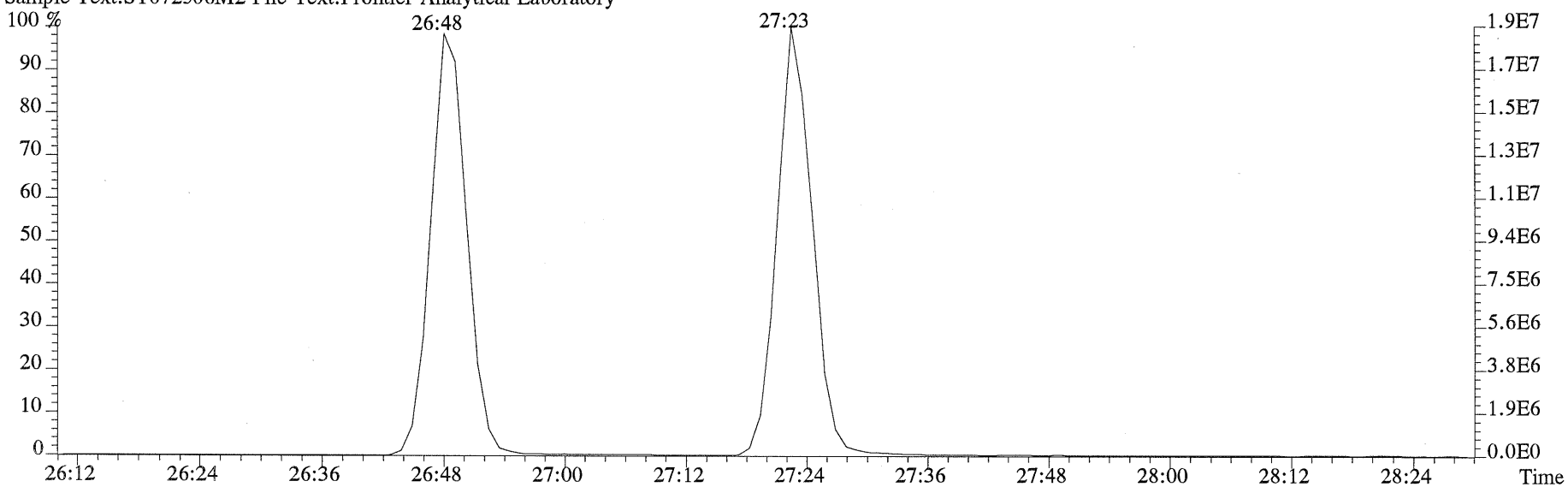




File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:10 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

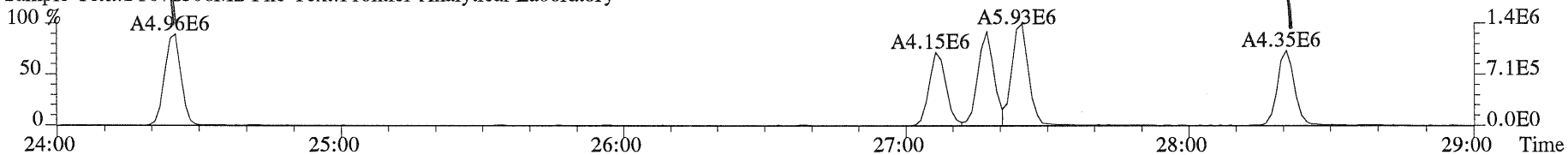


File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:10 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

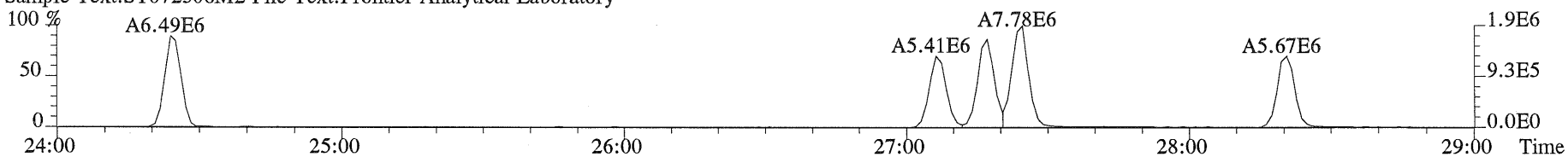


308

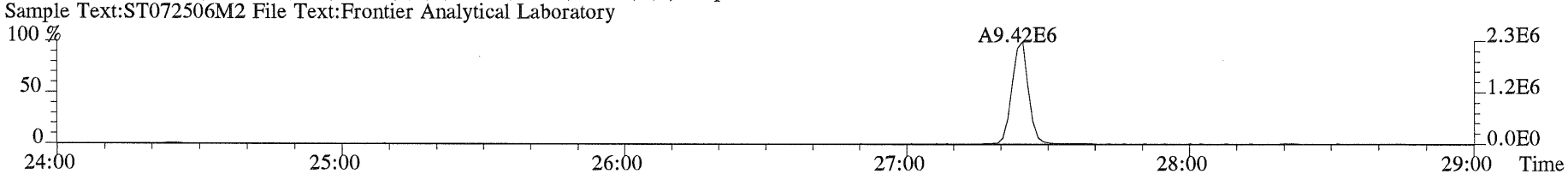
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



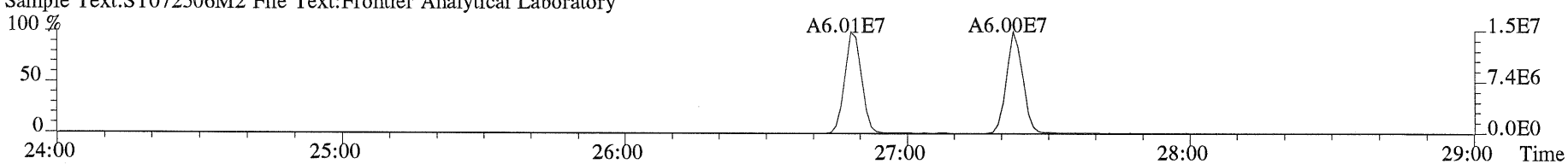
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



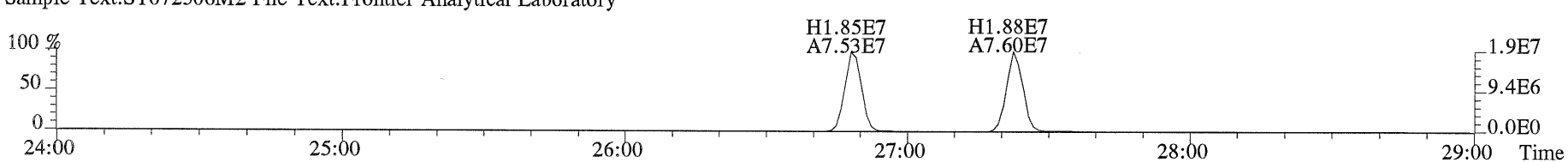
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

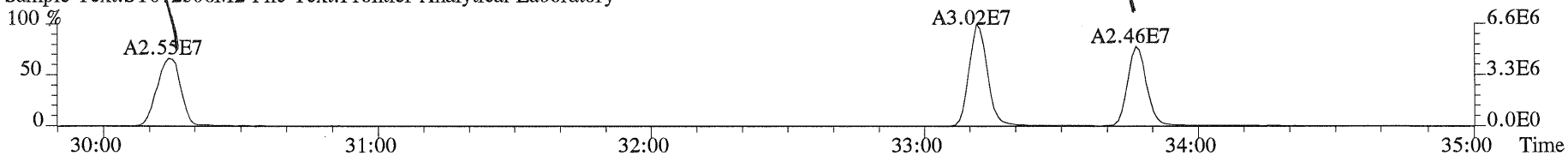


File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

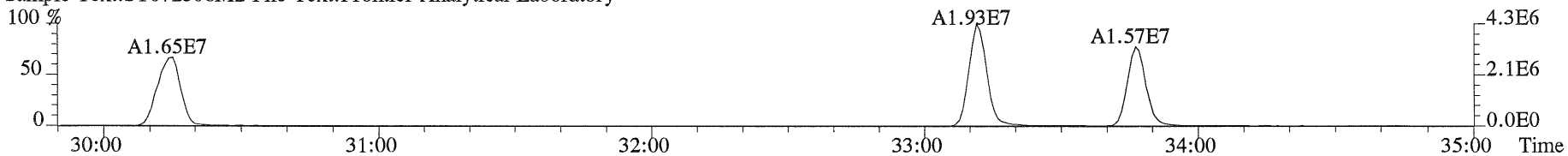


Klamath River Sediment Study

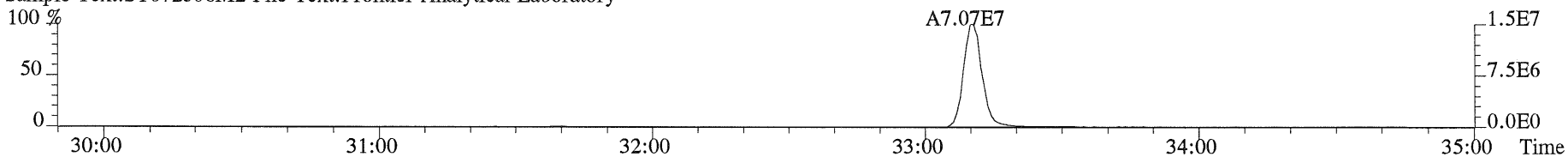
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



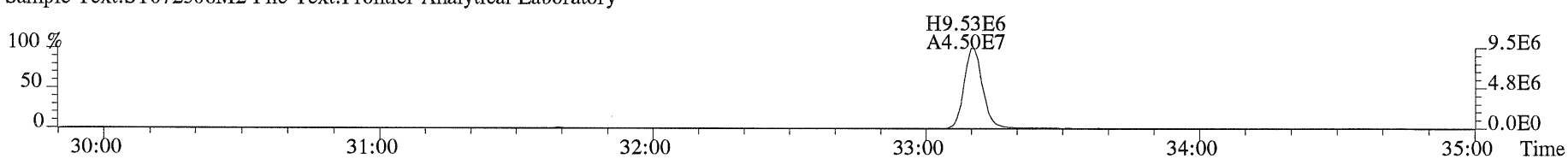
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



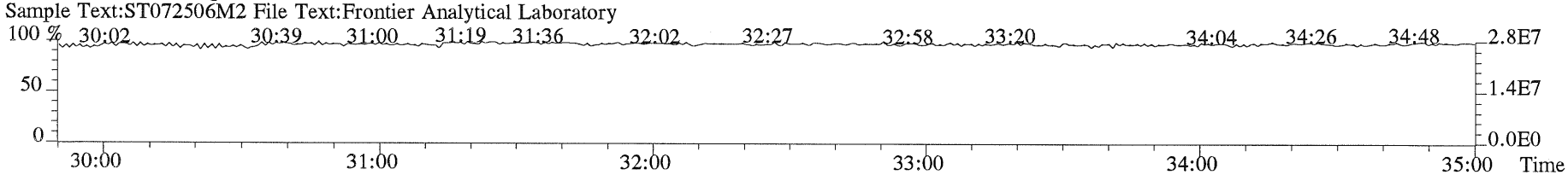
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

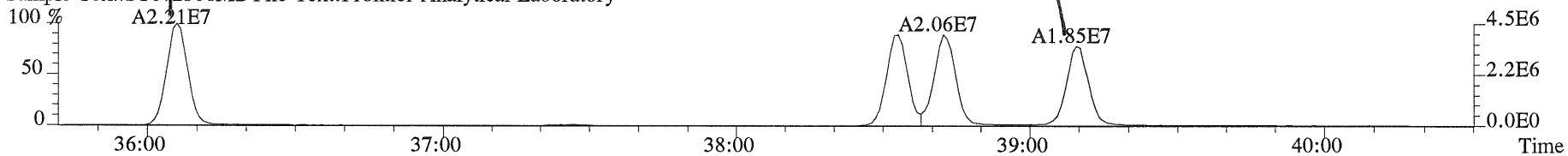


File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:10 F:2 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

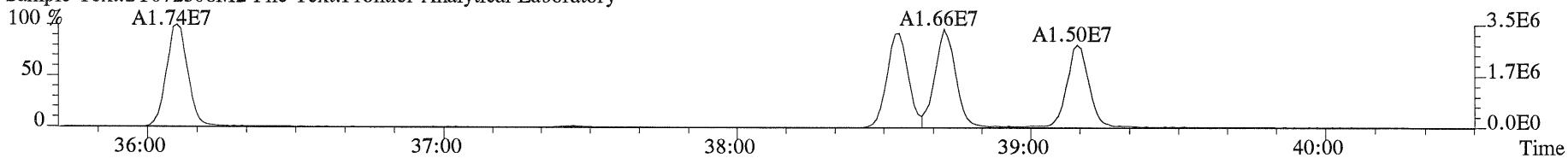


310

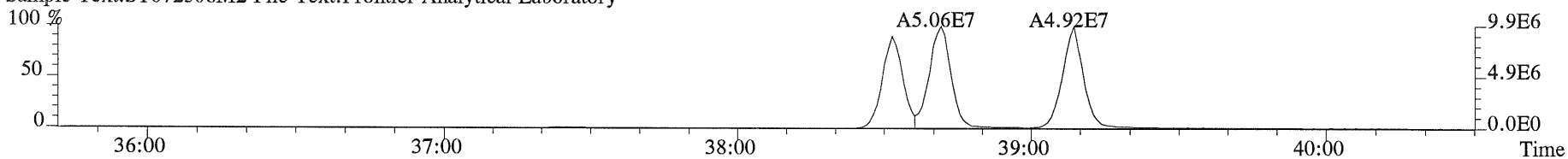
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



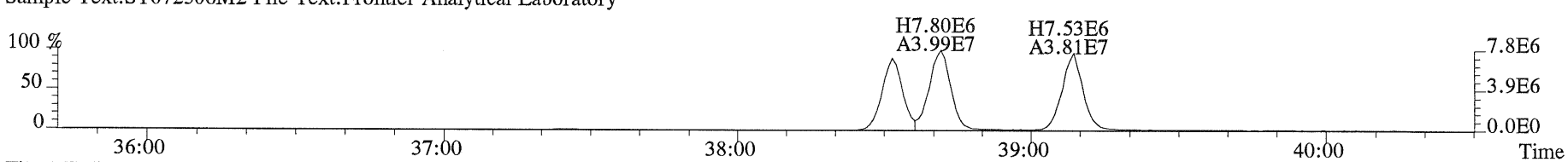
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



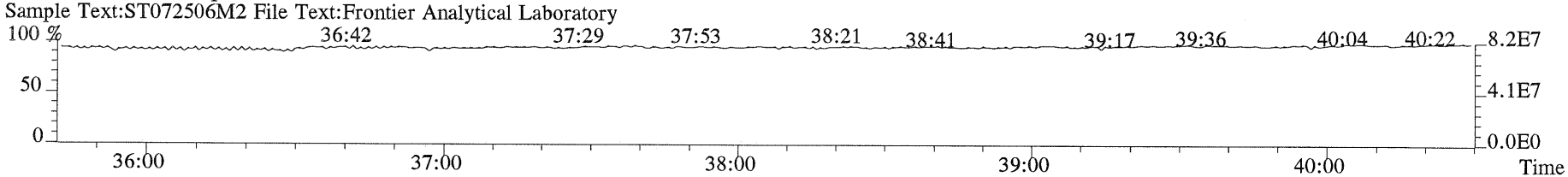
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



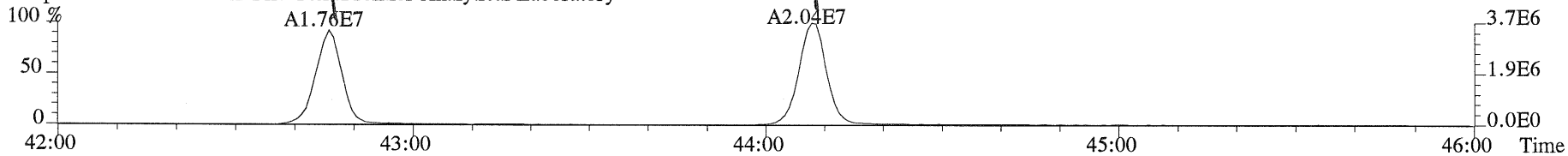
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



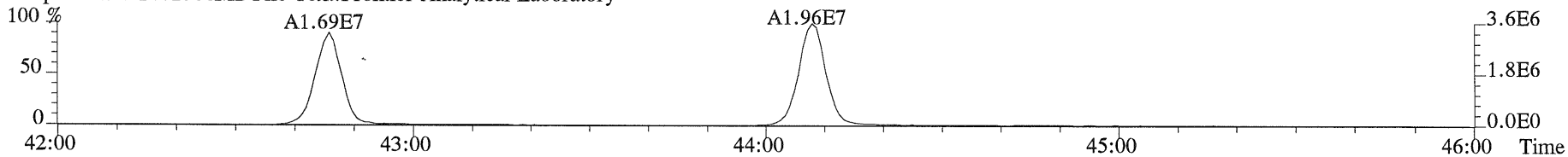
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:10 F:3 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



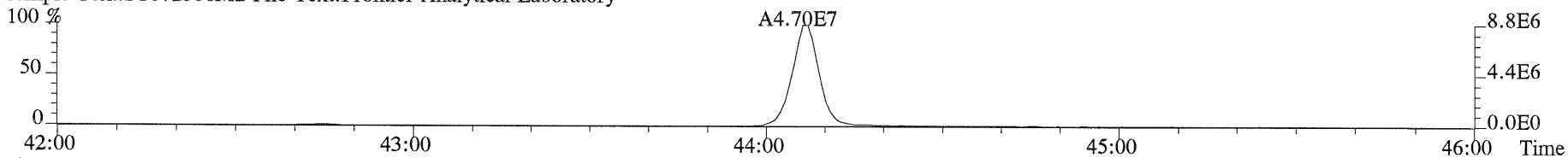
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



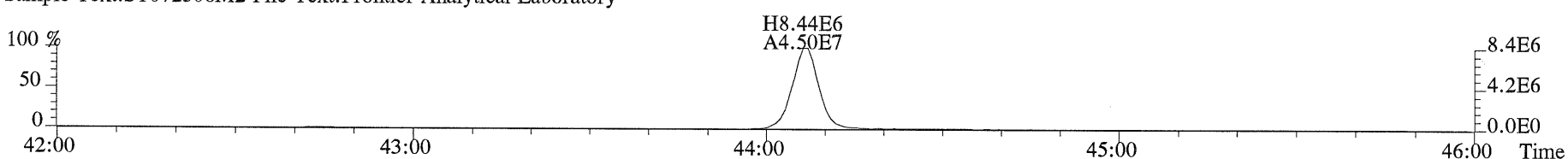
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



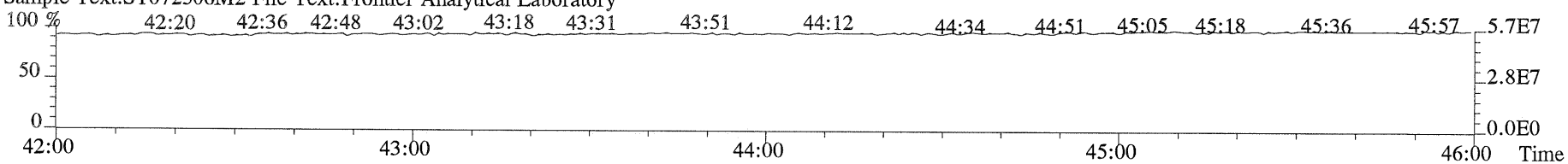
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



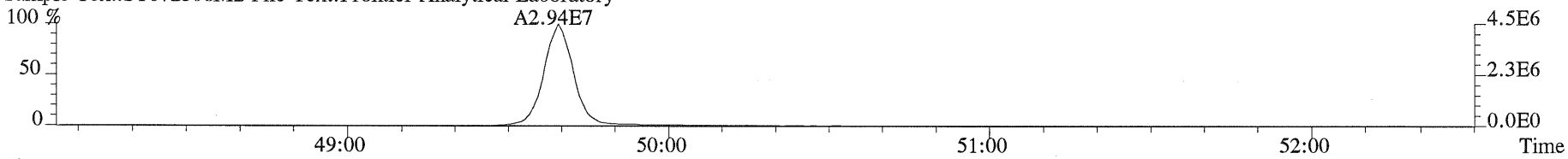
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



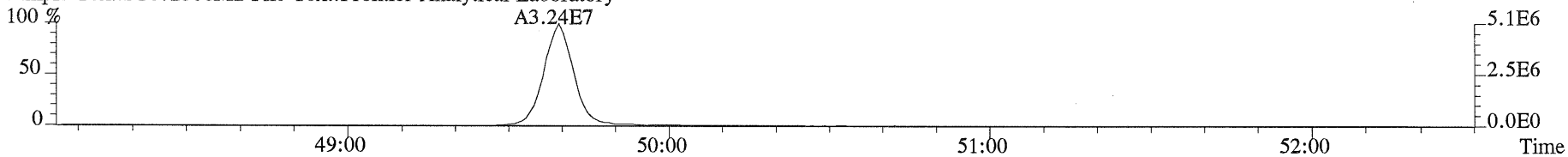
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:10 F:4 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



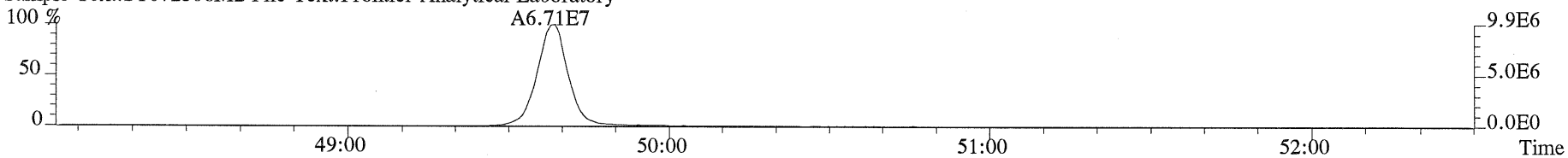
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



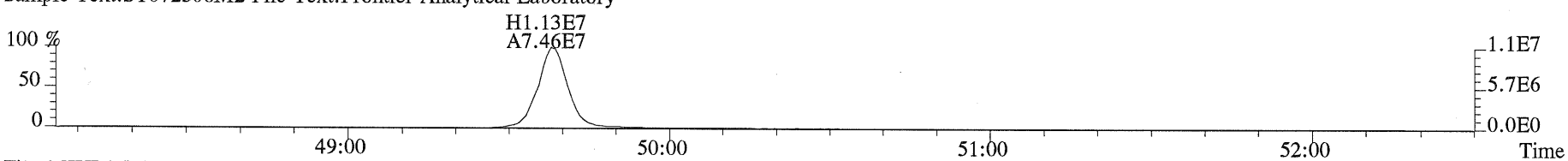
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



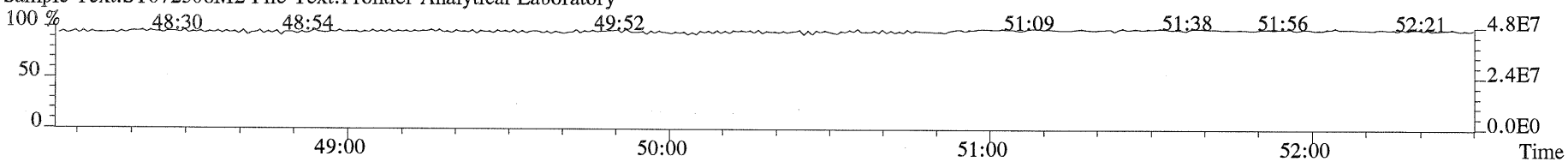
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



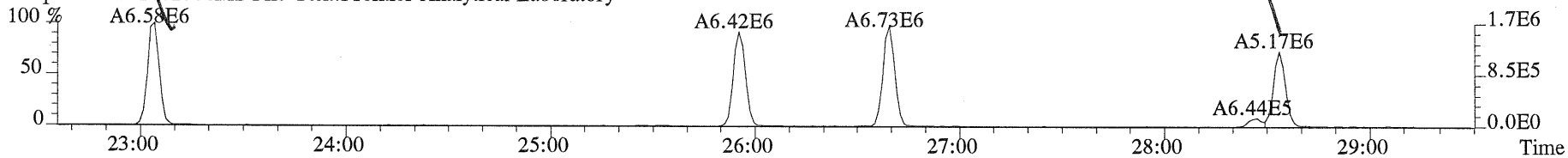
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



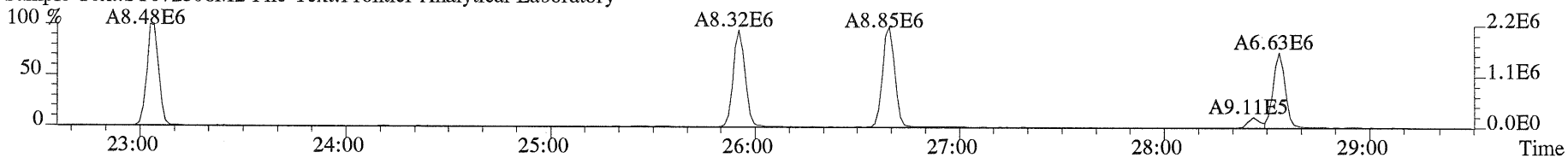
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:10 F:5 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



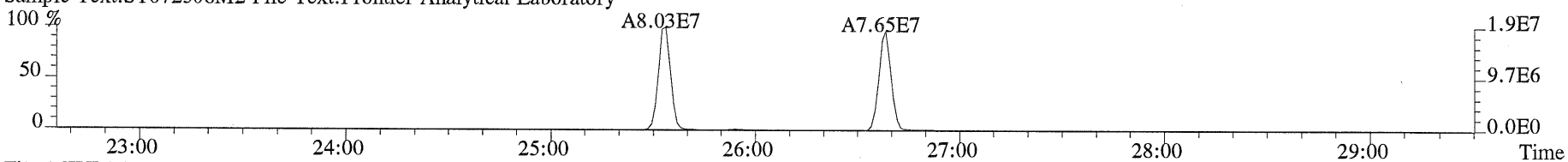
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



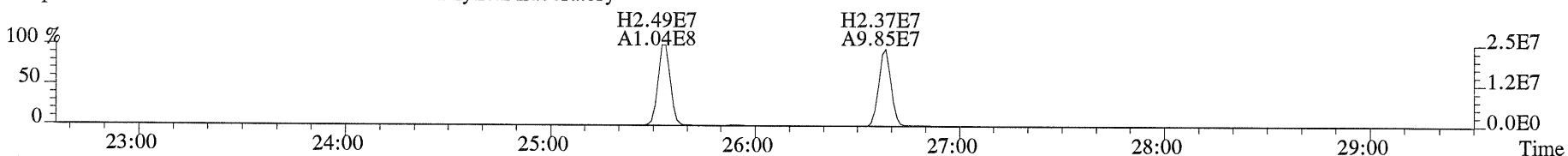
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



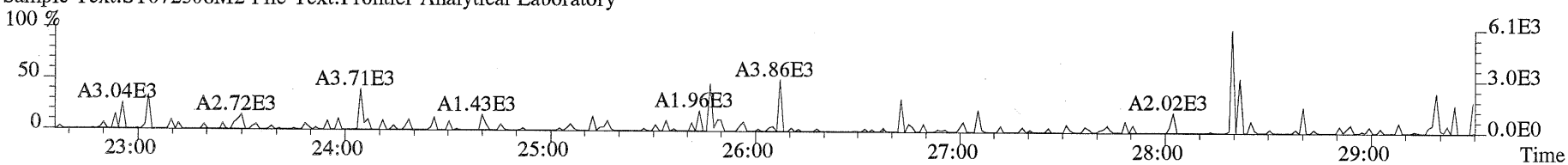
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



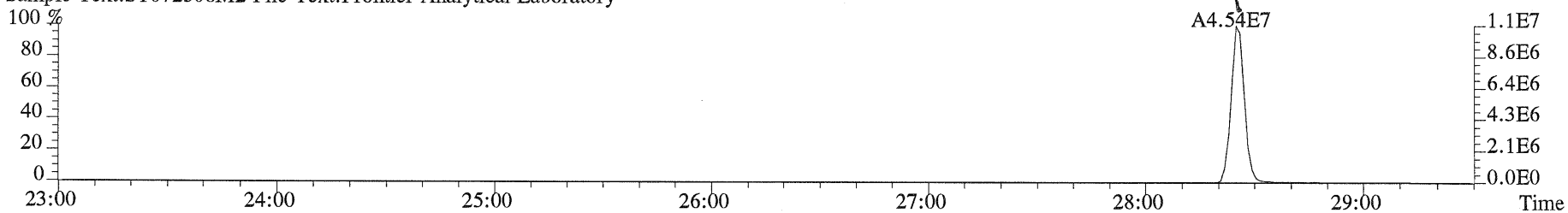
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



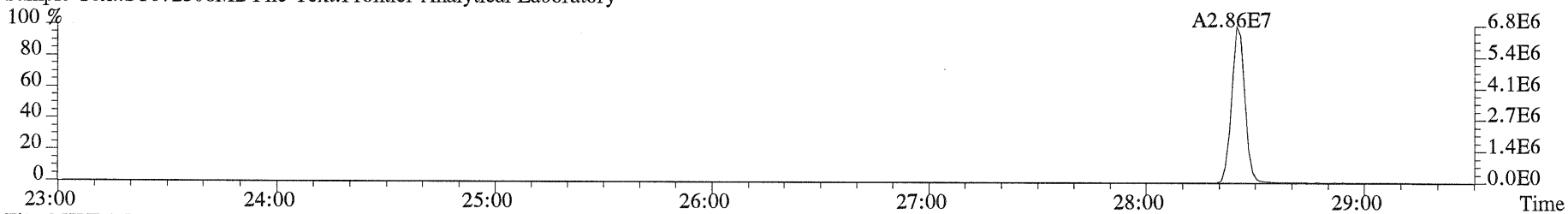
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



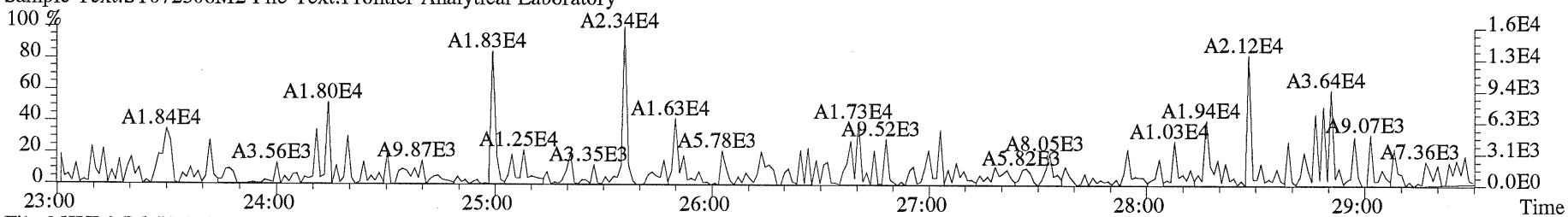
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



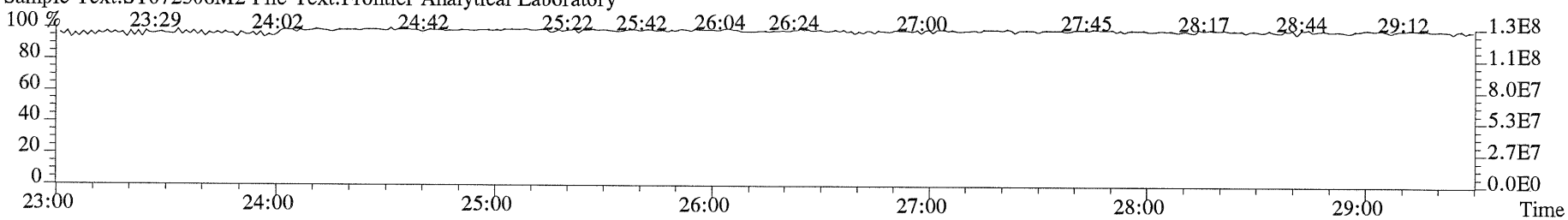
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



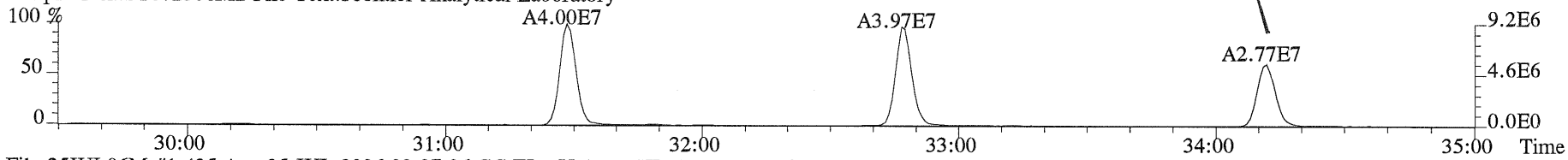
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



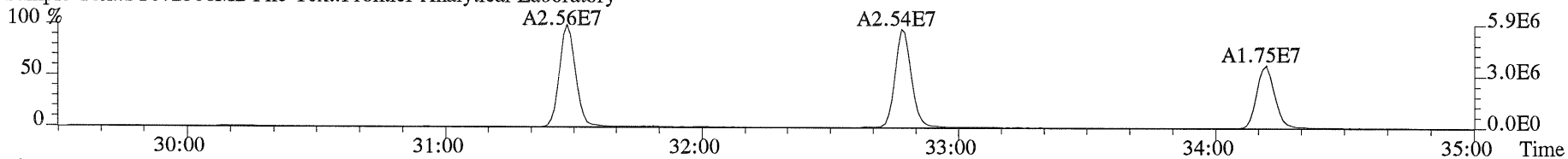
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:10 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



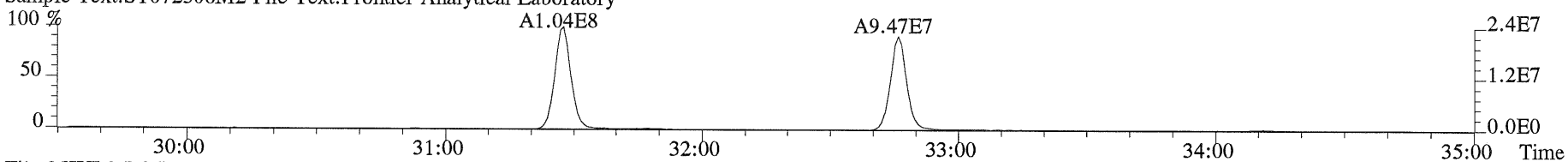
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



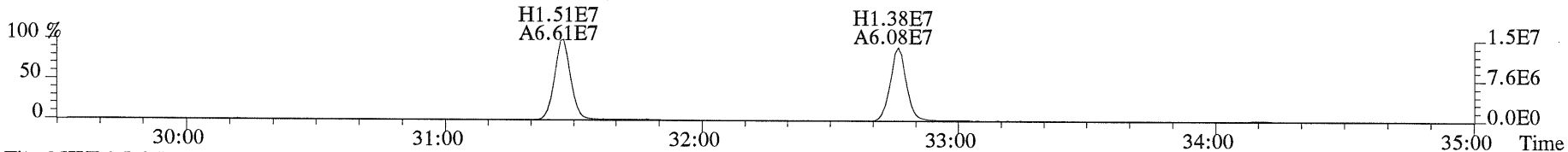
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



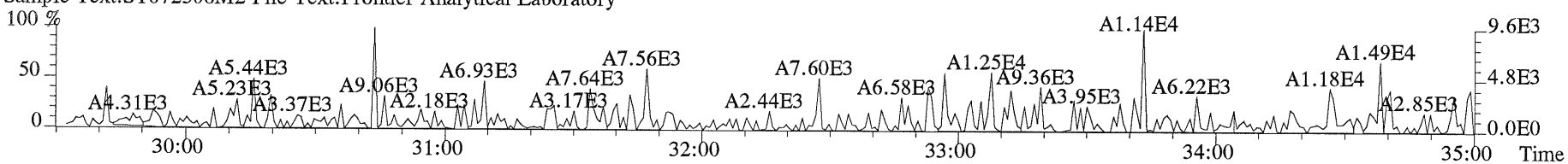
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



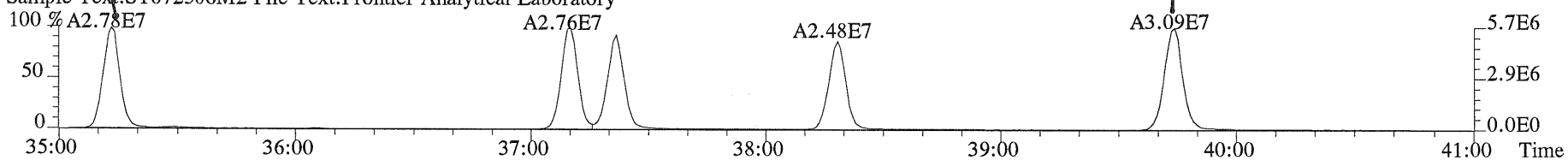
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



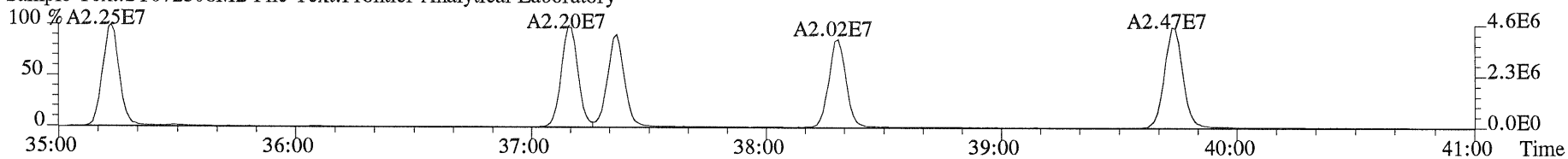
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



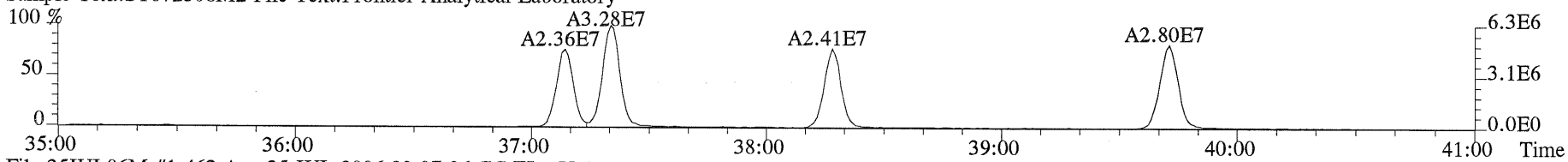
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



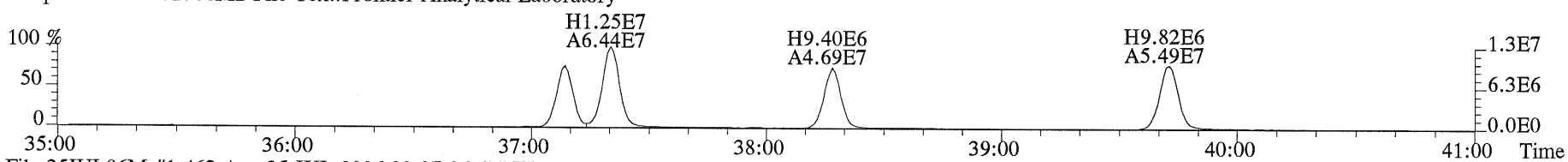
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



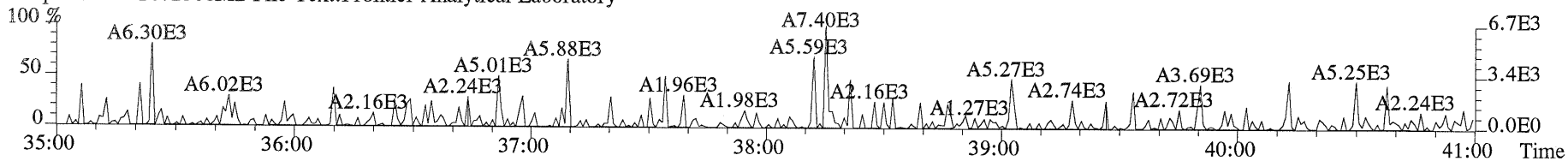
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



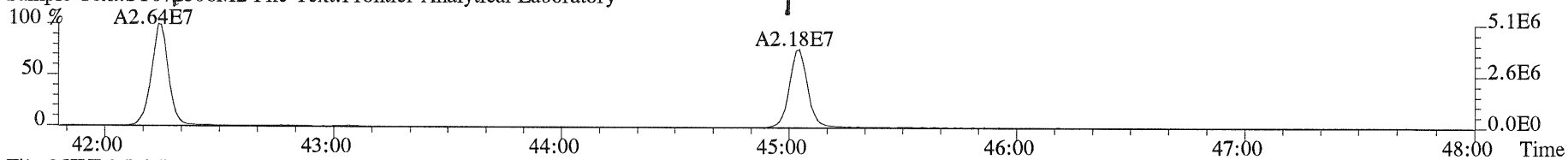
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



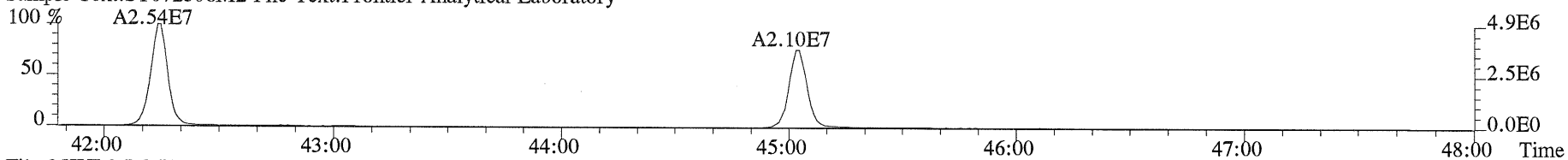
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



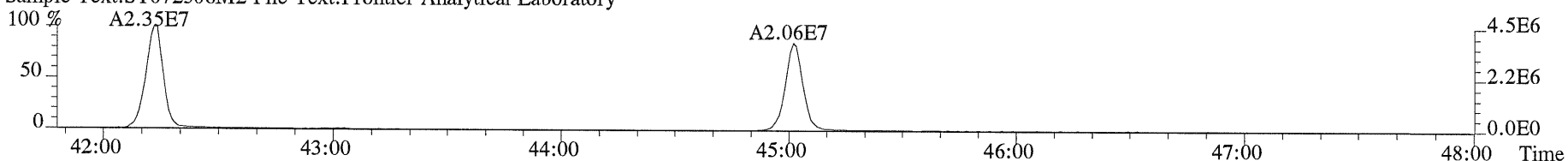
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



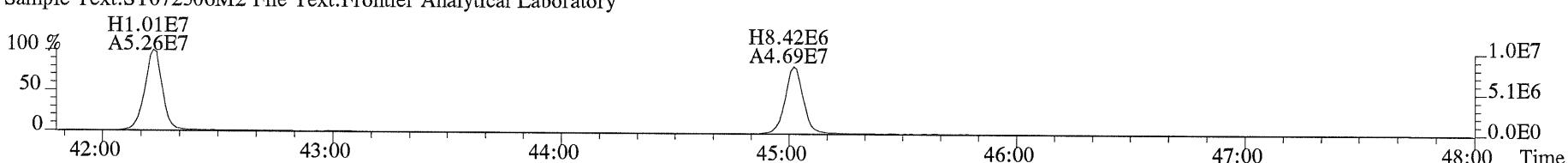
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



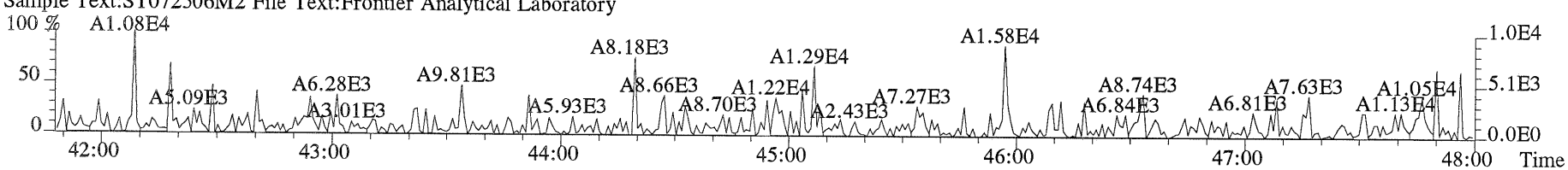
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



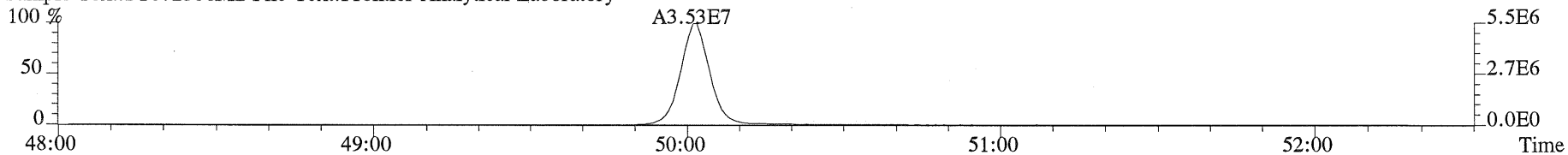
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



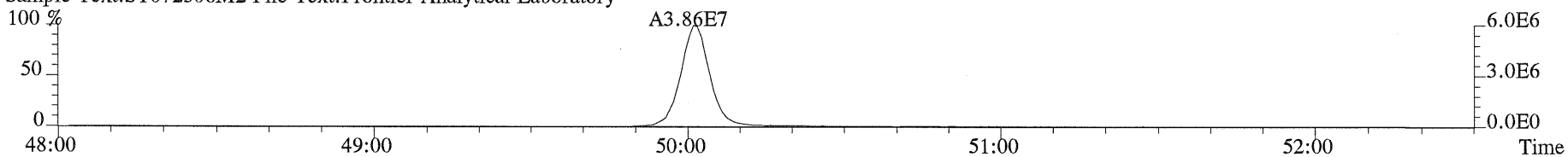
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



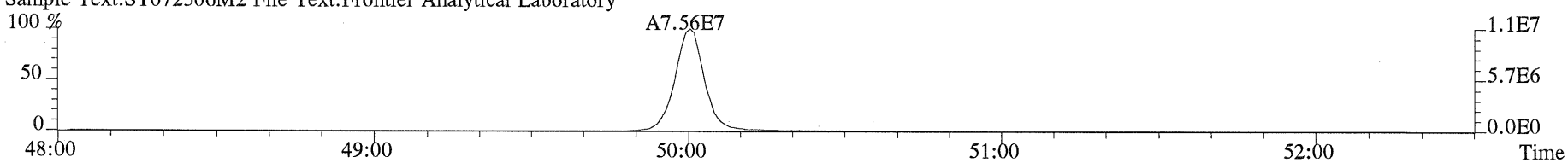
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



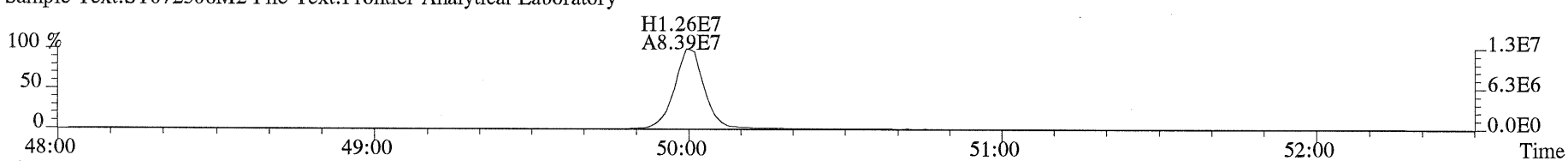
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



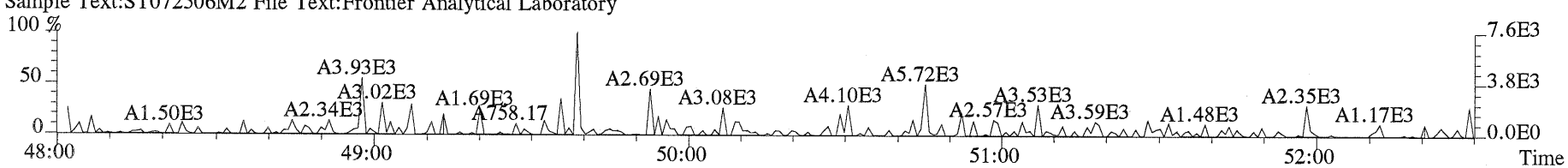
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



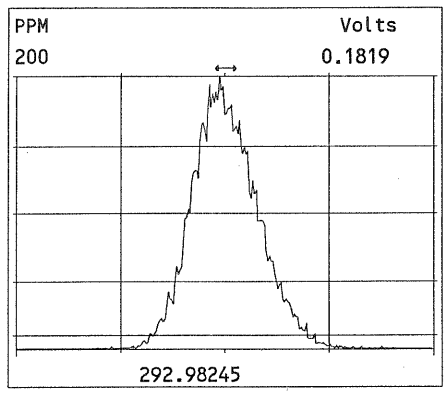
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

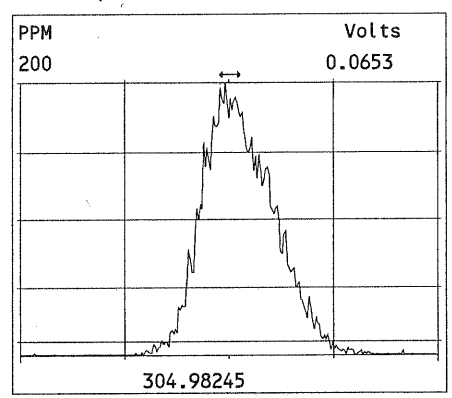


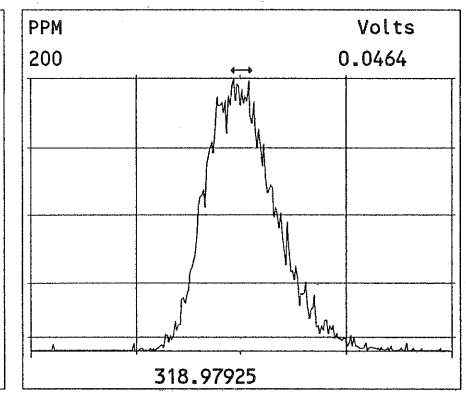
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

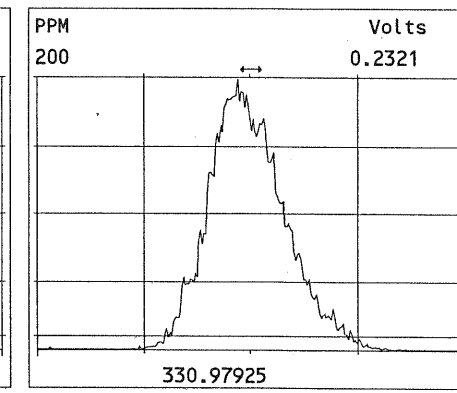


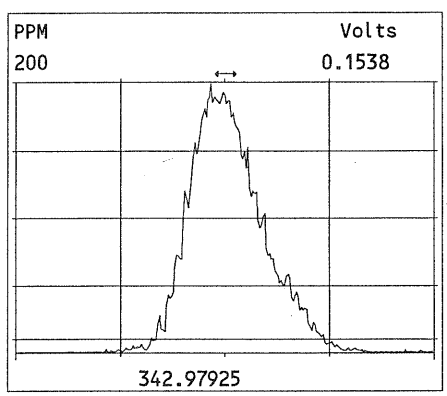
Peak Locate Examination:26-JUL-2006:10:12 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

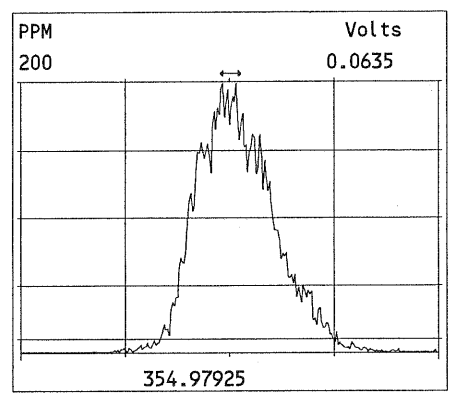


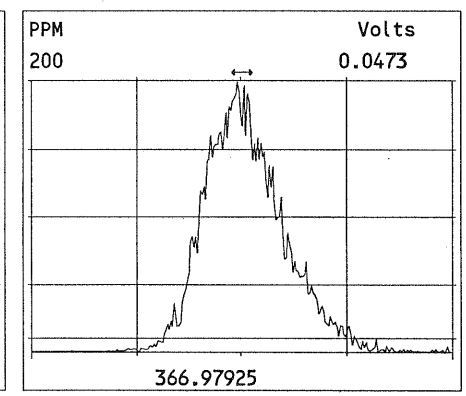


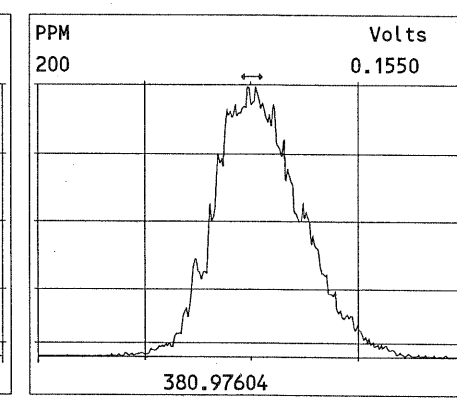


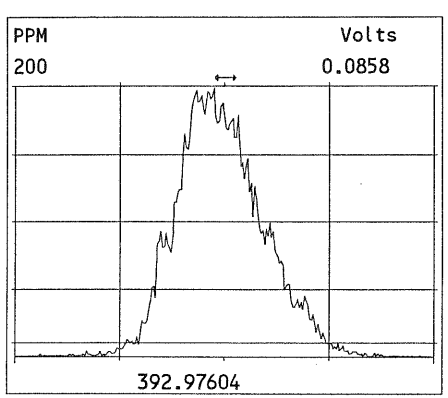


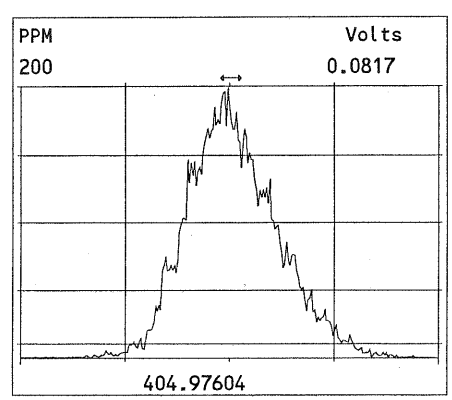


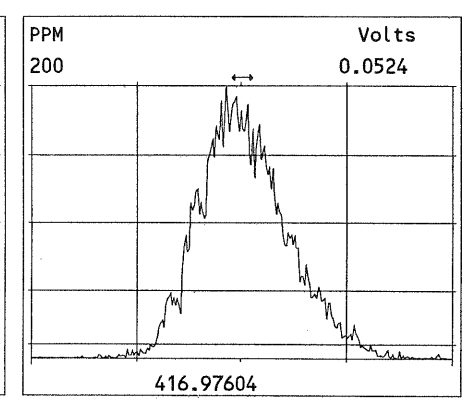




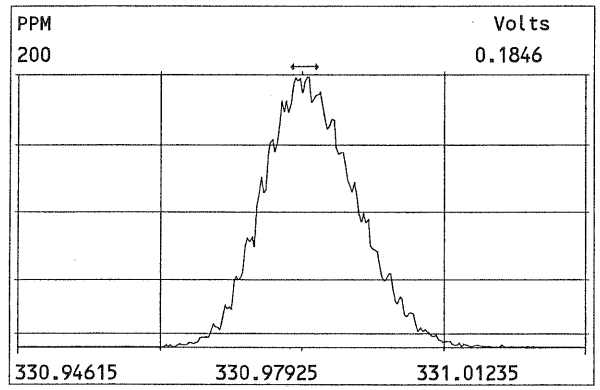


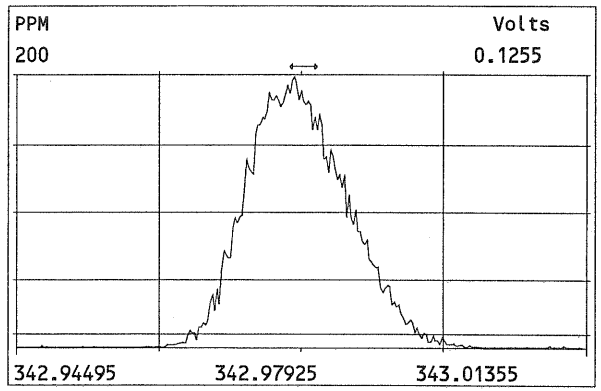


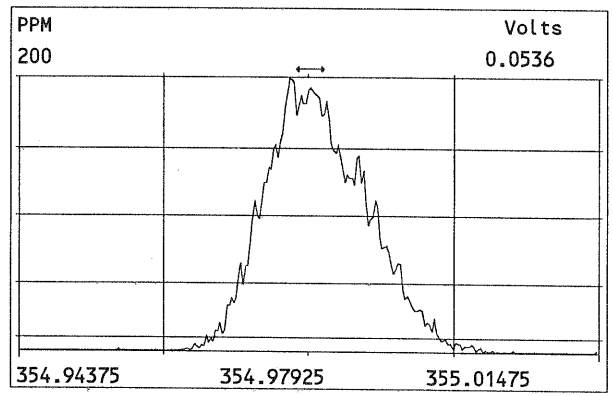


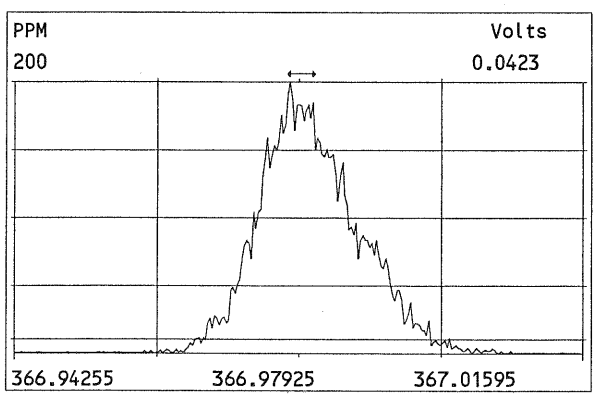


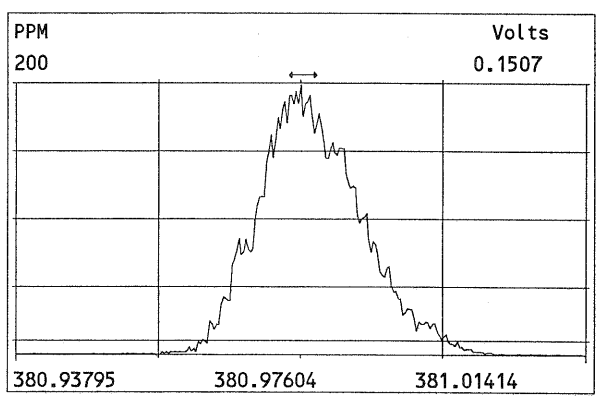
Peak Locate Examination:26-JUL-2006:10:14 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

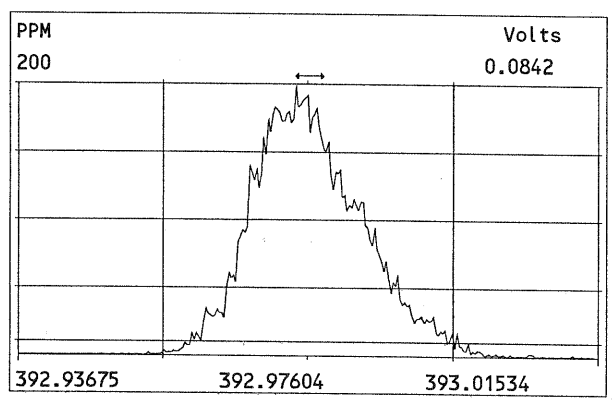


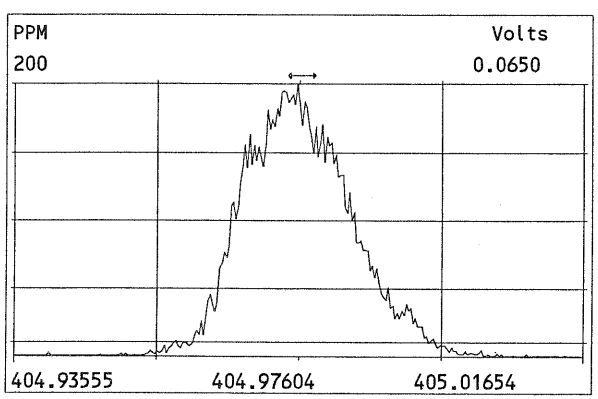


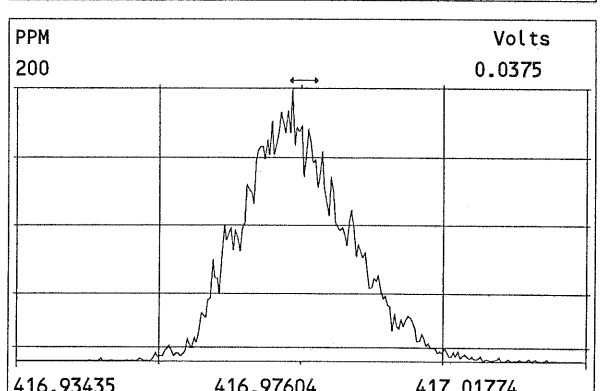




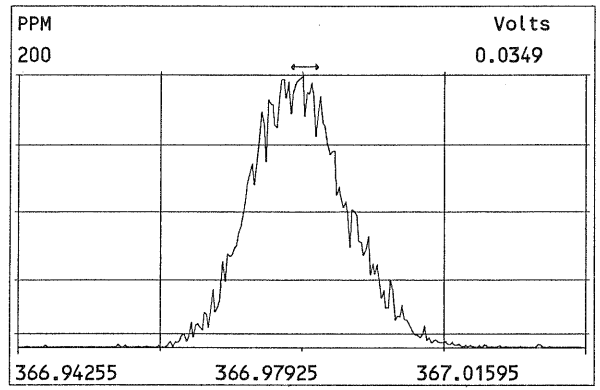


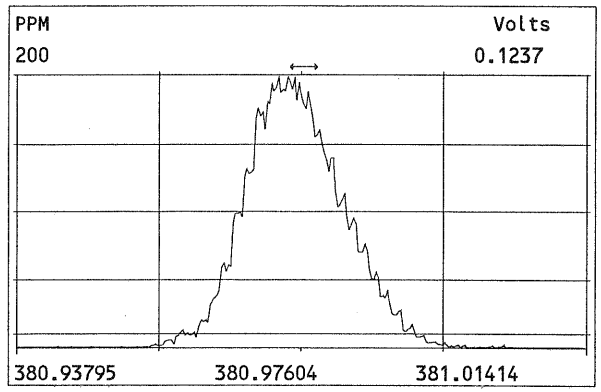


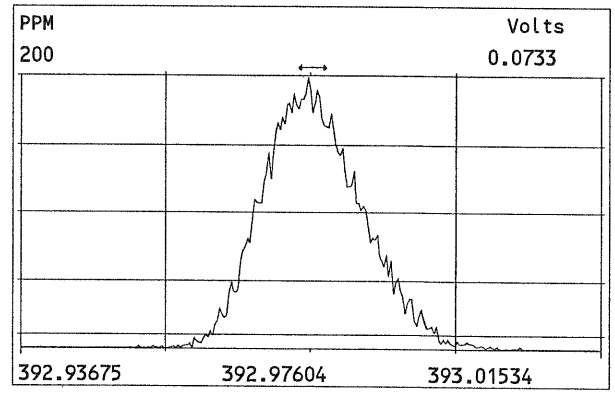


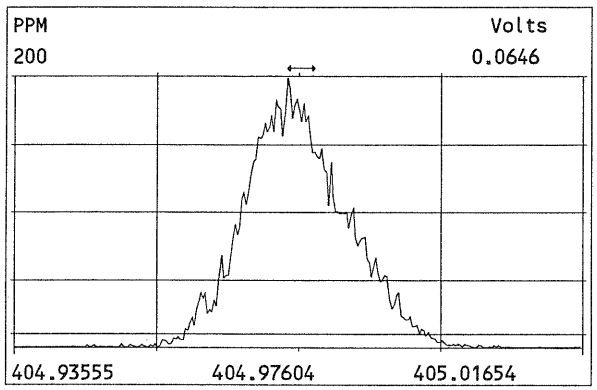


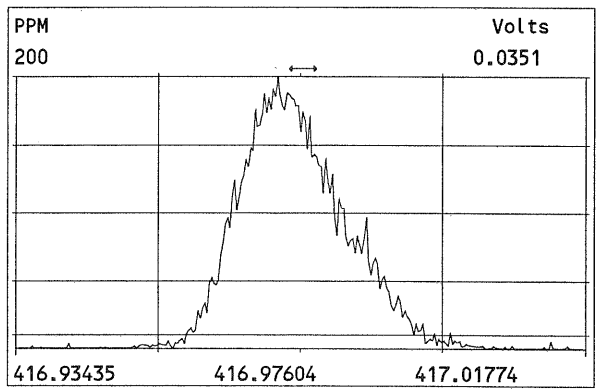
Peak Locate Examination:26-JUL-2006:10:16 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

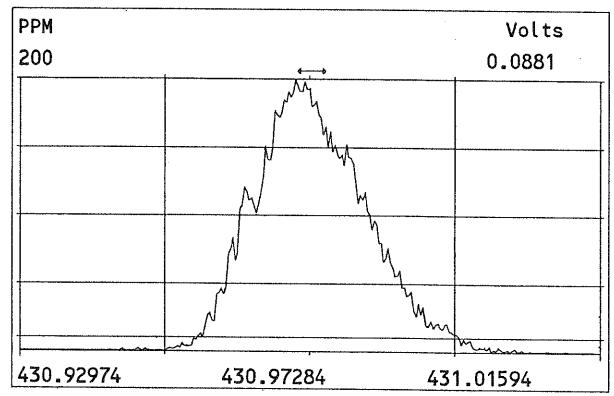


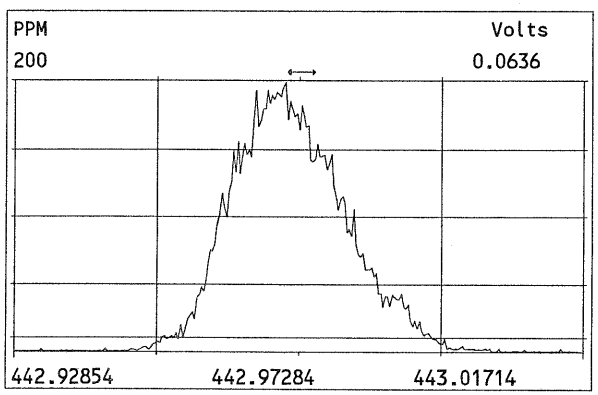


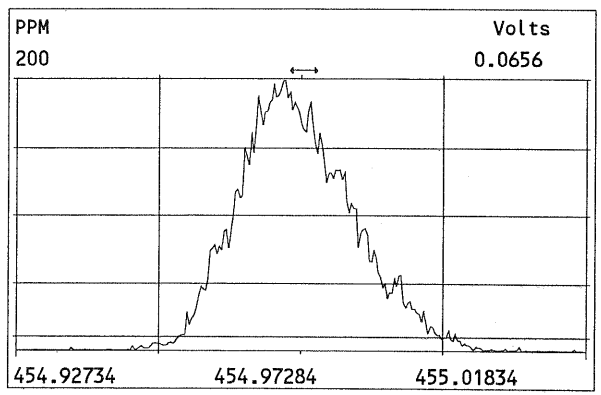




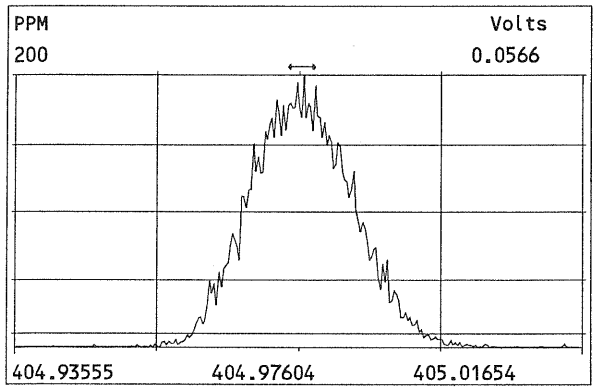


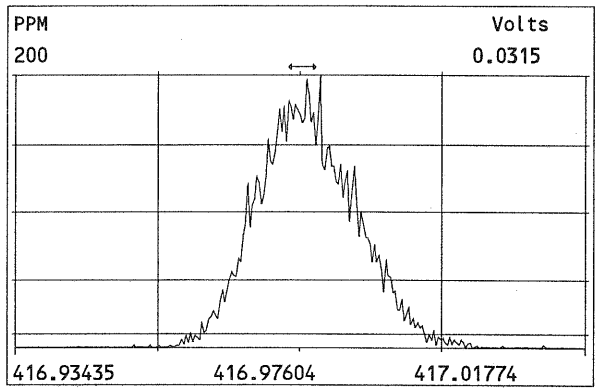


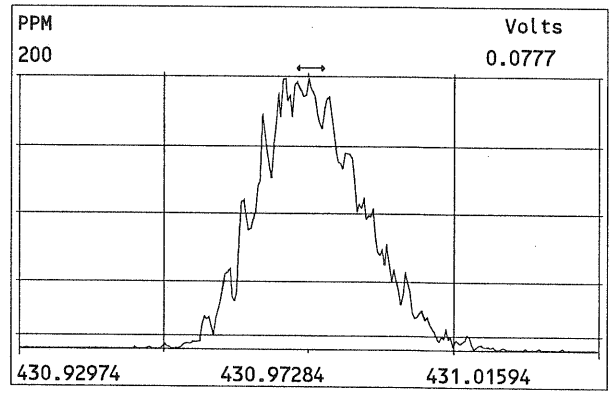


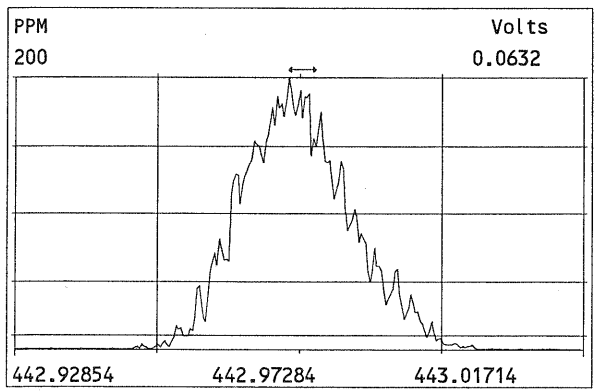


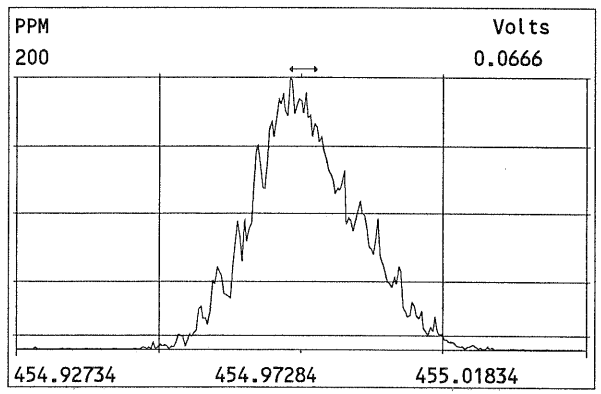
Peak Locate Examination:26-JUL-2006:10:18 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

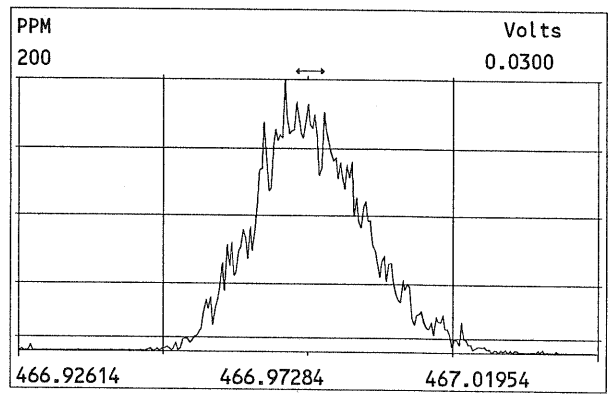


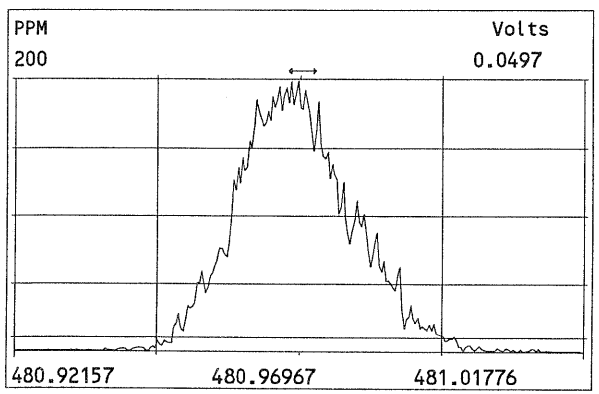




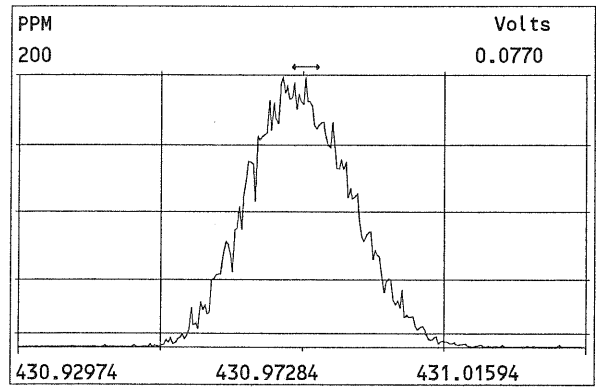


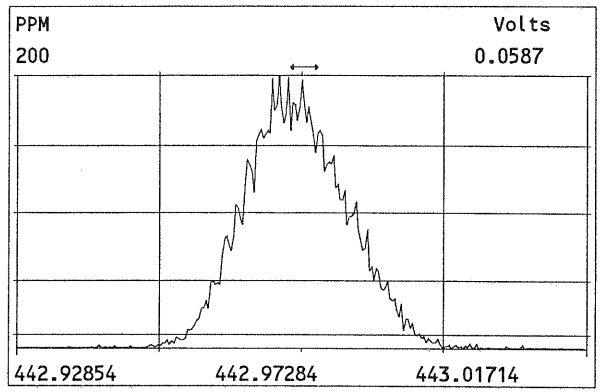


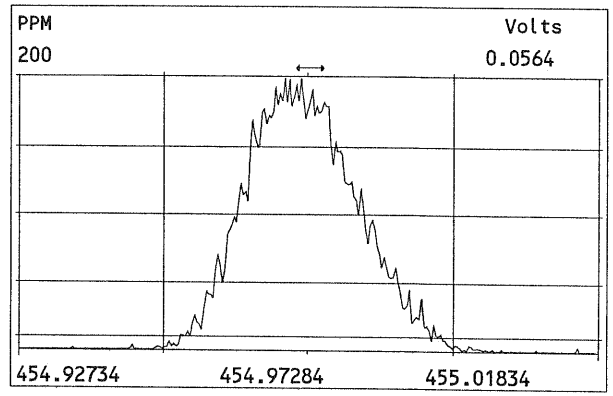


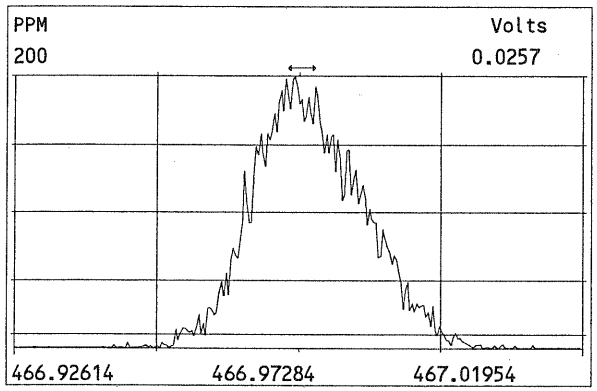


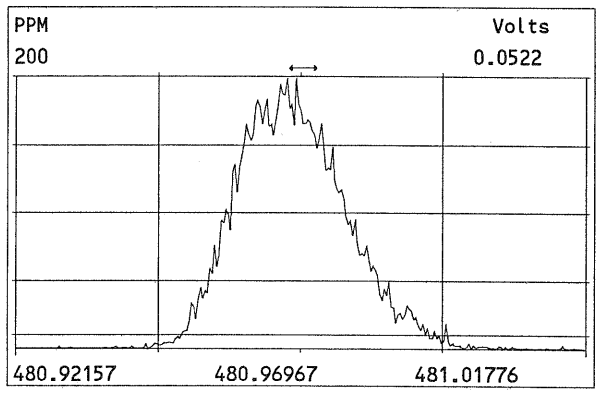
Peak Locate Examination:26-JUL-2006:10:20 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

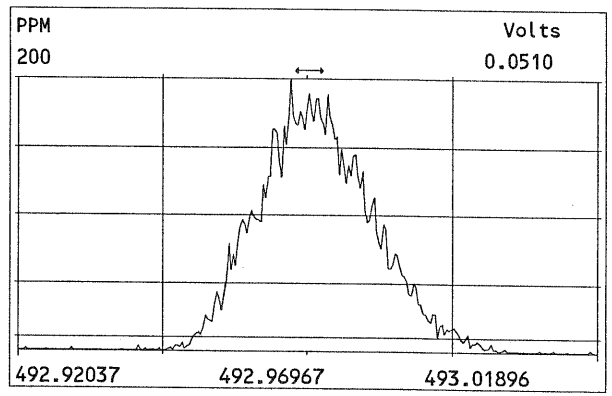


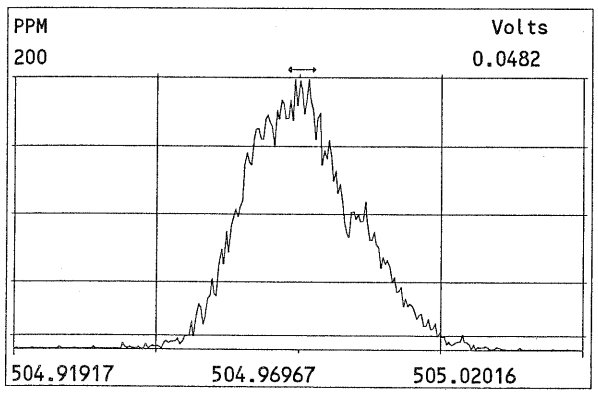


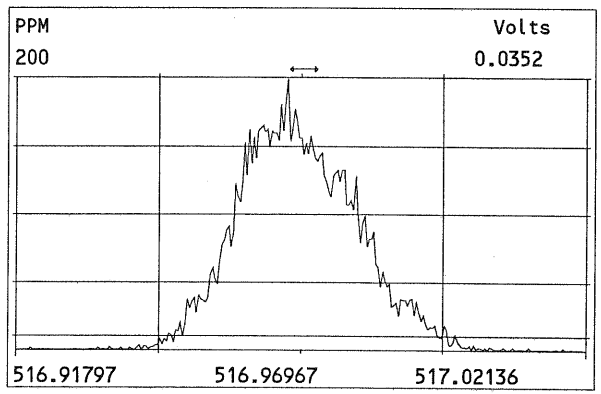












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: db5

VER Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 09:16:01

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.74	0.65-0.89	y	8.03	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	y	42.5	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	43.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	45.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	43.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	48.7	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	8.01	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	44.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	44.3	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	46.3	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	44.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	46.1	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.26	1.05-1.43	y	45.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	y	47.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	48.7	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	92.4	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: JK Date: 7/26/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: db5

VER Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 09:16:01

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	93.7	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	y	80.9	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	98.2	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.34	1.05-1.43	y	94.2	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	94.6	72.0 - 138
13C-OCDD	M+2/M+4	0.86	0.76-1.02	y	204	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	97.4	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	82.2	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	83.1	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	85.8	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	85.8	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	88.4	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.47	0.43-0.59	y	90.0	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.41	0.37-0.51	y	84.1	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	90.3	77.0 - 129
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	191	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					7.81	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: [signature] Date: 7/24/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 Time: 09:16:01

DB-5 IS Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 Time: 09:16:01

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:25	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:47	1,2,3,8,9-PeCDF (L)	34:13
1,2,4,6,7,9-HxCDD (F)	36:07	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:11	1,2,3,7,8,9-HxCDF (L)	39:45
1,2,3,4,6,7,9-HpCDD (F)	42:47	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:09	1,2,3,4,7,8,9-HpCDF (L)	45:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 26-JUL-06 09:16:01 CS3 or VER Data Filename: 25JUL06M Sam:21

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.002	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.022	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.173	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.222	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [illegible] Date: 7/26/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 26-JUL-06 09:16:01 CS3 or VER Data Filename: 25JUL06M Sam:21

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.278	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/26/06

FAL ID: ST072506M3 Filename: 25JUL06M Sam:21 Acquired: 26-JUL-06 09:16:01 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072506M2 EndCal: ST072506M3
Results: 3956 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 87.6
WHO 1998 Tox: 109

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	2.01e+06	0.74 y	27:25	1.10	8.03		2.50	-	*	
1,2,3,7,8-PeCDD	7.22e+06	1.61 y	33:12	0.90	42.5		2.50	-	*	
1,2,3,4,7,8-HxCDD	5.11e+06	1.29 y	38:34	0.96	43.9		2.50	-	*	
1,2,3,6,7,8-HxCDD	5.23e+06	1.28 y	38:44	0.83	45.2		2.50	-	*	
1,2,3,7,8,9-HxCDD	4.42e+06	1.23 y	39:11	0.77	43.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	5.19e+06	1.04 y	44:09	0.86	48.7		2.50	-	*	
OCDD	8.72e+06	0.90 y	49:41	0.87	101		2.50	-	*	
2,3,7,8-TCDF	2.35e+06	0.79 y	26:41	0.99	8.01		2.50	-	*	
1,2,3,7,8-PeCDF	9.39e+06	1.62 y	31:29	0.80	44.1		2.50	-	*	
2,3,4,7,8-PeCDF	9.85e+06	1.63 y	32:48	0.88	44.3		2.50	-	*	
1,2,3,4,7,8-HxCDF	6.63e+06	1.30 y	37:11	1.42	46.3		2.50	-	*	
1,2,3,6,7,8-HxCDF	6.19e+06	1.21 y	37:23	0.97	44.4		2.50	-	*	
2,3,4,6,7,8-HxCDF	6.20e+06	1.23 y	38:20	1.26	46.1		2.50	-	*	
1,2,3,7,8,9-HxCDF	7.33e+06	1.26 y	39:45	1.34	45.5		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	6.07e+06	1.02 y	42:15	1.28	47.8		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	5.11e+06	1.03 y	45:03	1.22	48.7		2.50	-	*	
OCDF	8.87e+06	0.90 y	50:03	0.90	92.4		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	2.27e+07	0.77 y	27:24	1.00	93.7					93.7
13C-1,2,3,7,8-PeCDD	1.88e+07	1.61 y	33:12	0.96	80.9					80.9
13C-1,2,3,4,7,8-HxCDD	1.21e+07	1.29 y	38:32	0.90	98.2					98.2
13C-1,2,3,6,7,8-HxCDD	1.40e+07	1.34 y	38:42	1.09	94.2					94.2
13C-1,2,3,4,6,7,8-HpCDD	1.24e+07	1.04 y	44:08	0.96	94.6					94.6
13C-OCDD	1.99e+07	0.86 y	49:39	0.71	204					102
13C-2,3,7,8-TCDF	2.96e+07	0.76 y	26:38	0.94	97.4					97.4
13C-1,2,3,7,8-PeCDF	2.66e+07	1.61 y	31:28	1.00	82.2					82.2
13C-2,3,4,7,8-PeCDF	2.54e+07	1.61 y	32:47	0.94	83.1					83.1
13C-1,2,3,4,7,8-HxCDF	1.01e+07	0.51 y	37:09	0.86	85.8					85.8
13C-1,2,3,6,7,8-HxCDF	1.44e+07	0.49 y	37:22	1.23	85.8					85.8
13C-2,3,4,6,7,8-HxCDF	1.07e+07	0.49 y	38:18	0.88	88.4					88.4
13C-1,2,3,7,8,9-HxCDF	1.21e+07	0.47 y	39:43	0.98	90.0					90.0
13C-1,2,3,4,6,7,8-HpCDF	9.91e+06	0.41 y	42:15	0.86	84.1					84.1
13C-1,2,3,4,7,8,9-HpCDF	8.62e+06	0.42 y	45:03	0.70	90.3					90.3
13C-OCDF	2.14e+07	0.89 y	50:02	0.82	191					95.6
37Cl-2,3,7,8-TCDD	1.54e+06		27:25	0.81	7.81					78.1
13C-1,2,3,4-TCDD	2.43e+07	0.80 y	26:49	-	12.7					
13C-1,2,3,4-TCDF	3.24e+07	0.75 y	25:34	-	11.3					
13C-1,2,3,7,8,9-HxCDD	1.37e+07	1.29 y	39:09	-	9.15					
							Fac	Noise	DL	#Hom	
Total Tetra-Dioxins	7.89e+06		22:50	1.10	31.6		2.50	-	*	12	
Total Penta-Dioxins	1.93e+07		29:50	0.90	114		2.50	-	*	28	
Total Hexa-Dioxins	2.19e+07		35:11	0.85	197		2.50	-	*	30	
Total Hepta-Dioxins	1.17e+07		41:08	0.86	110		2.50	-	*	49	
Total Tetra-Furans	8.35e+06		23:04	0.99	28.4		2.50	-	*	18	
1st Fn. Tot Penta-Furans	1.22e+07		27:12	0.84	56.2		2.50	-	*	4	PeCDF
Total Penta-Furans	2.68e+07		29:41	0.84	123		2.50	-	*	29	179
Total Hexa-Furans	3.52e+07		35:14	1.22	243		2.50	-	*	33	
Total Hepta-Furans	3.40e+07		41:15	1.25	293		2.50	-	*	37	

Analyst: TK Date: 7/26/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:25JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

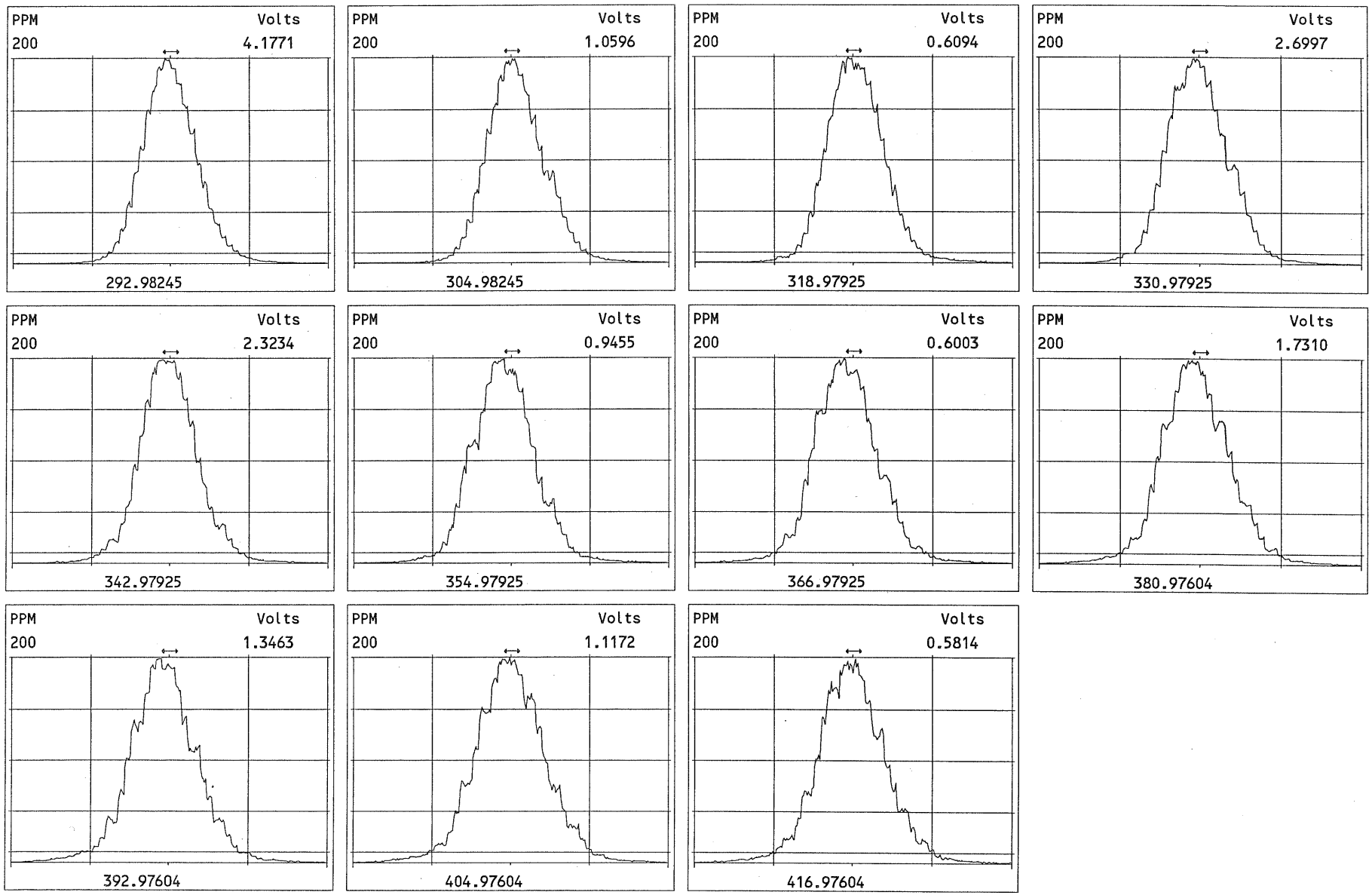
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
25JUL06M	1	ST072506M1	1613 CS3 (051212J)	25-JUL-06 14:41:35	ST072506M1	ST072506M2	DV
25JUL06M	2	3969-006-0001-SA	E2-B4-EP162-182	25-JUL-06 15:44:16	ST072506M1	ST072506M2	DV
25JUL06M	3	3969-009-0001-SA	E1-B1-EP85-164	25-JUL-06 16:39:41	ST072506M1	ST072506M2	DV
25JUL06M	4	SB072506M1	Solvent Blank	25-JUL-06 17:35:04	ST072506M1	ST072506M2	DV
25JUL06M	5	0913-001-0001-OPR	OPR	25-JUL-06 18:30:25	ST072506M1	ST072506M2	DV
25JUL06M	6	0913-001-0001-MB	Method Blank	25-JUL-06 19:25:45	ST072506M1	ST072506M2	DV
25JUL06M	7	3969-004-X002-SA	E8-162-T-C7@15	25-JUL-06 20:21:04	ST072506M1	ST072506M2	DV
25JUL06M	8	3969-002-X002-SA	E3-A4-EP168-181	25-JUL-06 21:16:24	ST072506M1	ST072506M2	DV
25JUL06M	9	SB072506M2	Solvent Blank	25-JUL-06 22:11:47	ST072506M1	ST072506M2	DV
25JUL06M	10	ST072506M2	1613 CS3 (051212J)	25-JUL-06 23:07:06	ST072506M1	ST072506M2	DV
25JUL06M	11	3956-001-0001-SA	IG7-S1	26-JUL-06 00:02:34	ST072506M2	ST072506M3	DV
25JUL06M	12	3963-001-0001-SA	061409-08	26-JUL-06 00:58:02	ST072506M2	ST072506M3	DV
25JUL06M	13	3963-002-0001-SA	061409-09	26-JUL-06 01:53:21	ST072506M2	ST072506M3	DV
25JUL06M	14	3963-003-0001-SA	061409-10	26-JUL-06 02:48:37	ST072506M2	ST072506M3	DV
25JUL06M	15	3967-001-0001-SA	C-4, S-1	26-JUL-06 03:43:56	ST072506M2	ST072506M3	DV
25JUL06M	16	3968-001-0001-SA	STC-1	26-JUL-06 04:39:22	ST072506M2	ST072506M3	DV
25JUL06M	17	3968-002-0001-SA	STC-2	26-JUL-06 05:34:41	ST072506M2	ST072506M3	DV
25JUL06M	18	3968-003-0001-SA	STC-3	26-JUL-06 06:30:01	ST072506M2	ST072506M3	DV
25JUL06M	19	3968-004-0001-SA	STC-4	26-JUL-06 07:25:21	ST072506M2	ST072506M3	DV
25JUL06M	20	SB072506M3	Solvent Blank	26-JUL-06 08:20:42	ST072506M2	ST072506M3	DV
25JUL06M	21	ST072506M3	1613 CS3 (051212J)	26-JUL-06 09:16:01	ST072506M2	ST072506M3	DV

7/26/06

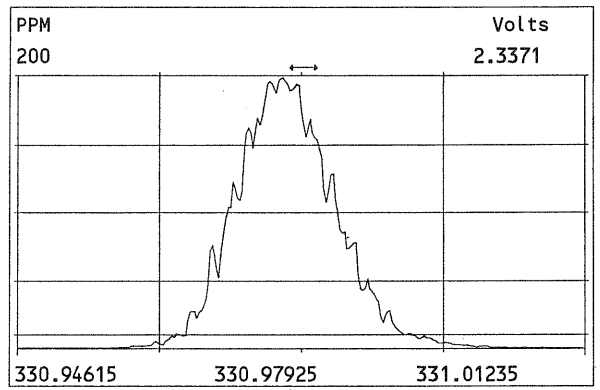
Data Backed Up:_____

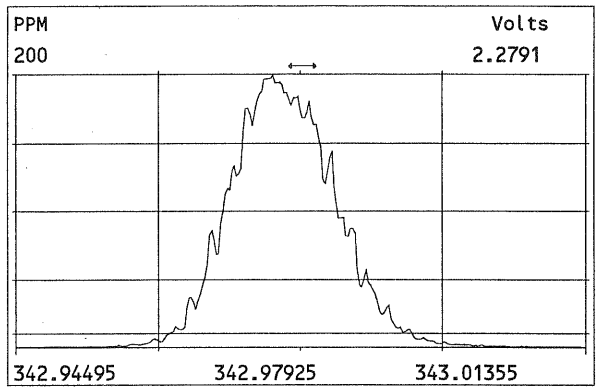
Date:_____

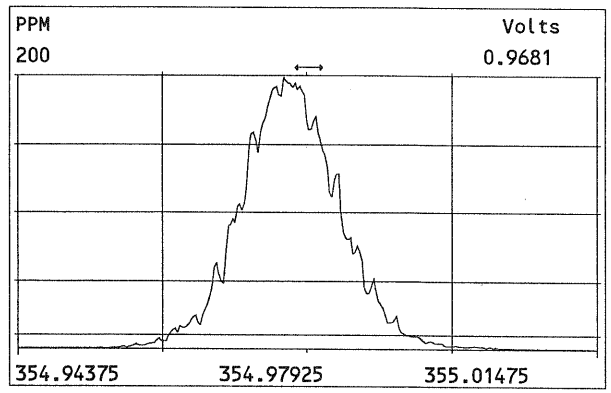
Peak Locate Examination:25-JUL-2006:14:39 File:25JUL06M
Experiment:PCDD Function:1 Reference:PFK

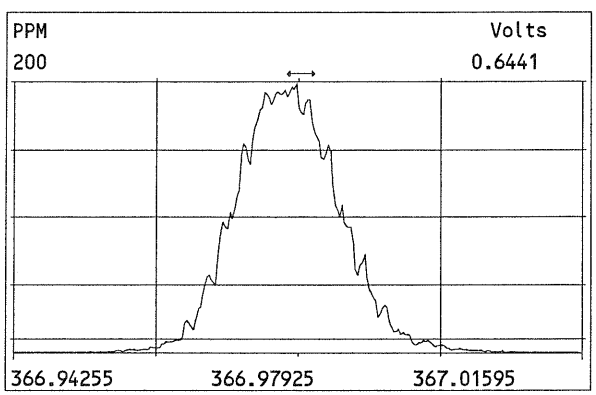


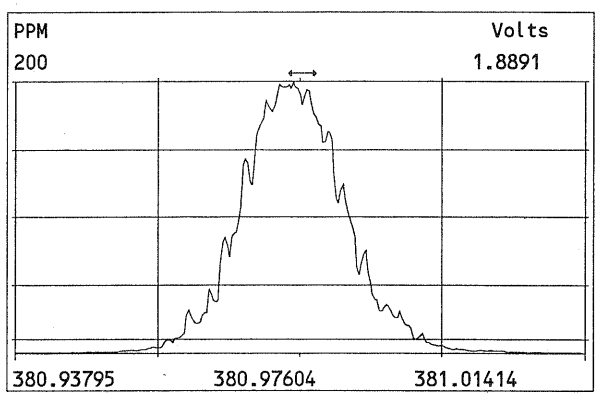
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:2 Reference:PFK

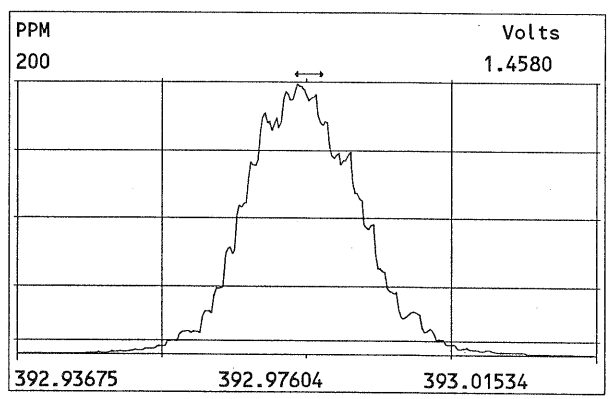


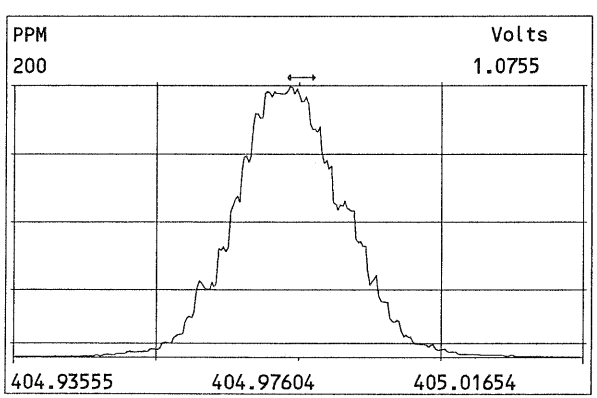


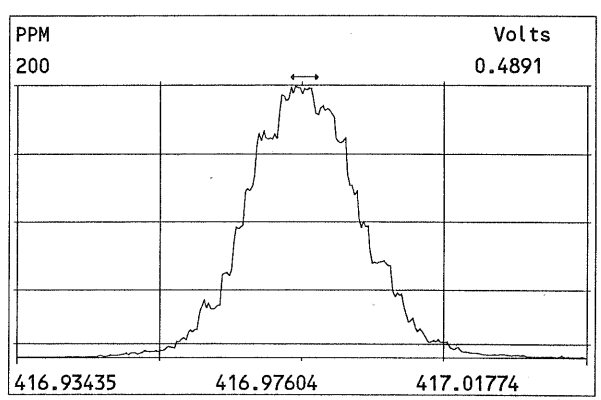




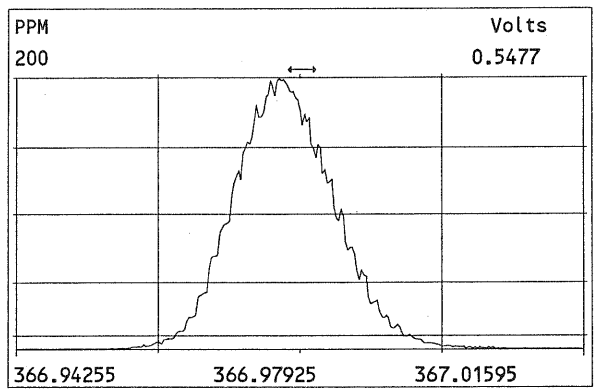


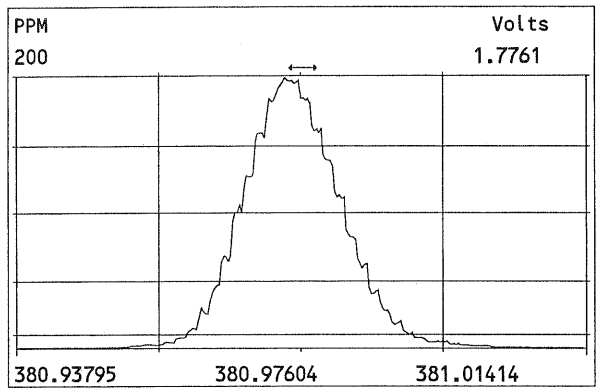


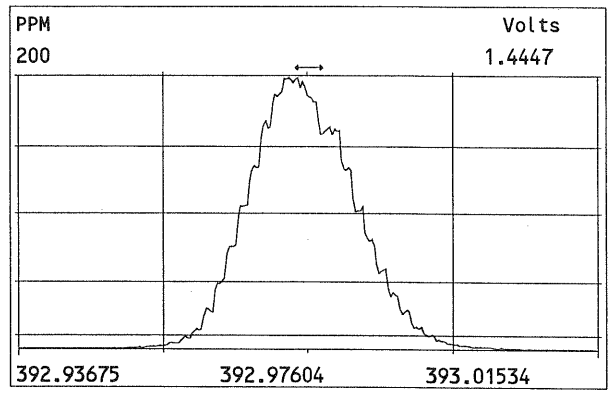


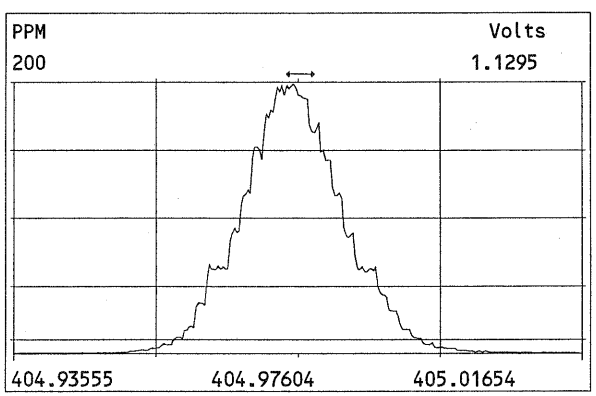


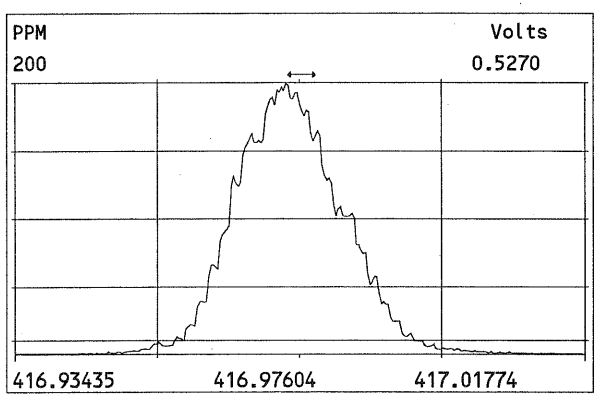
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:3 Reference:PFK

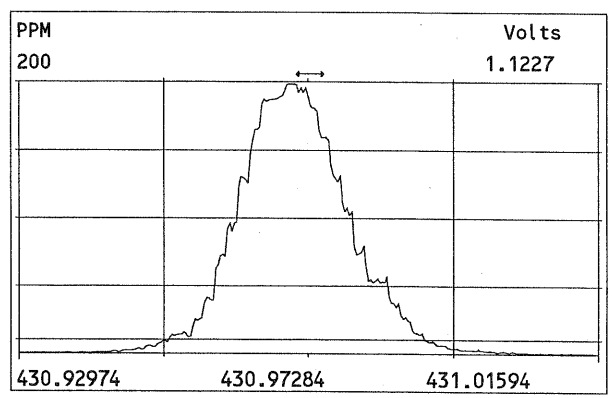


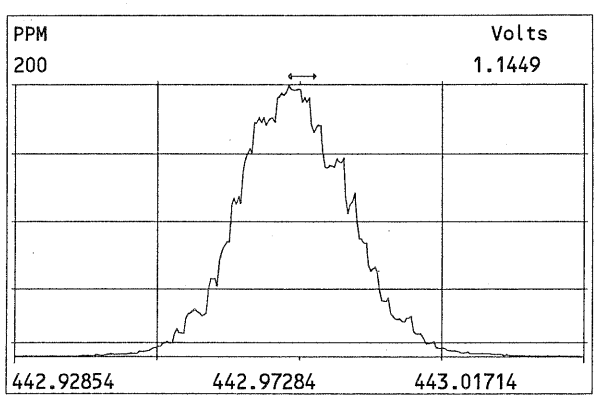


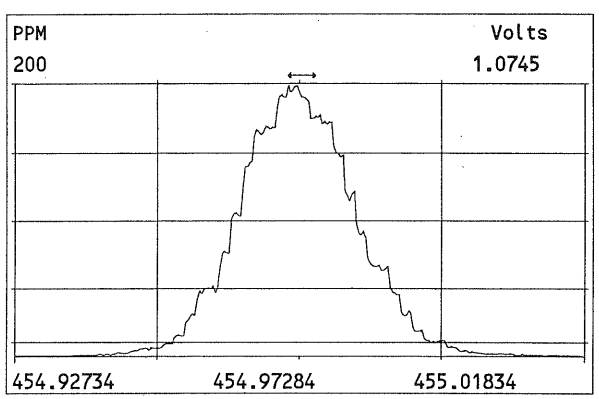




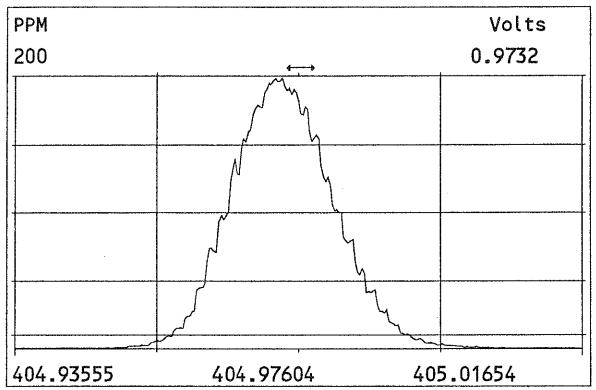


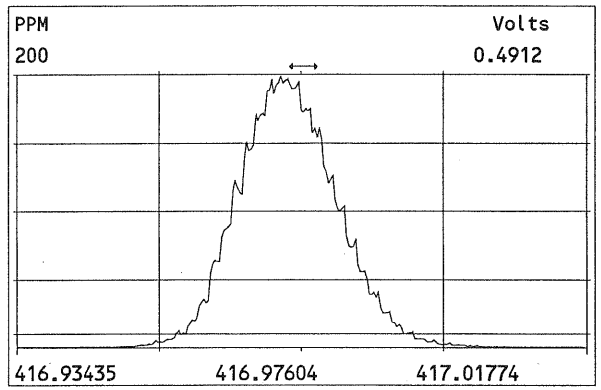


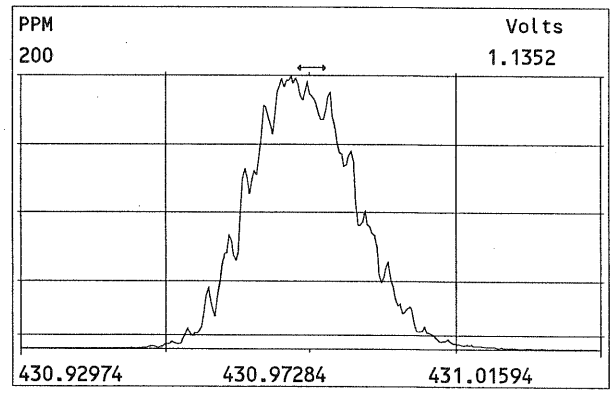


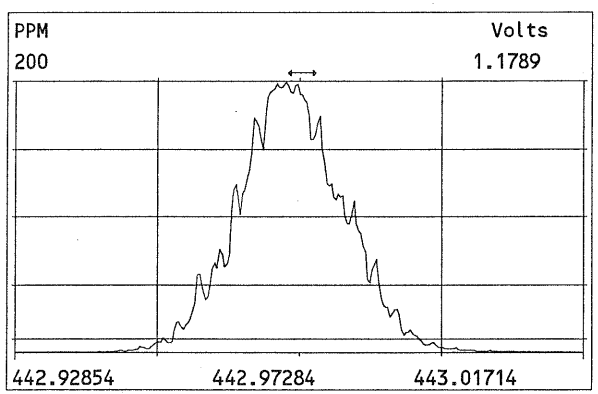


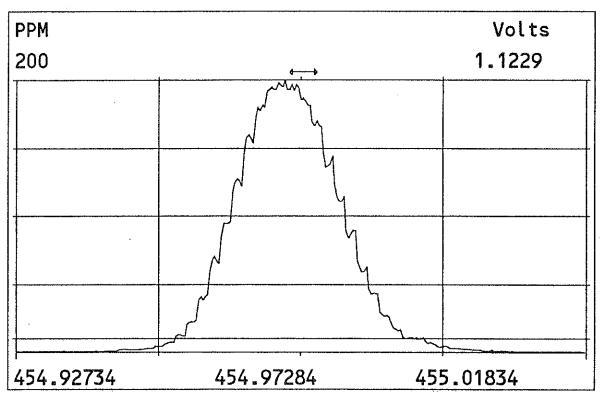
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:4 Reference:PFK

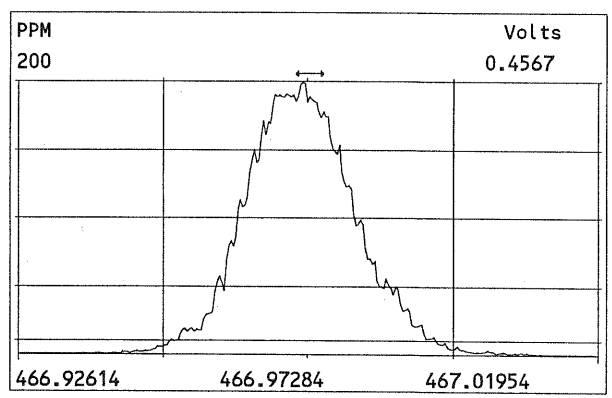


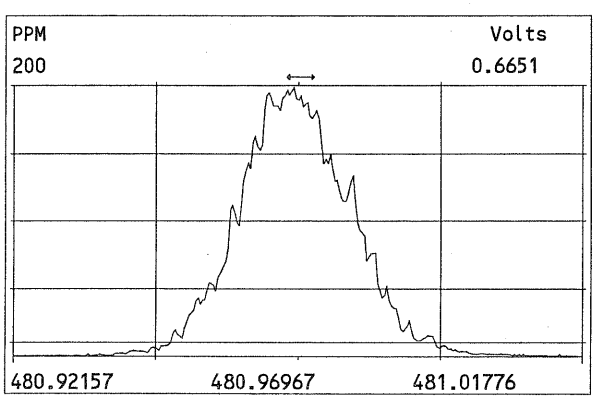




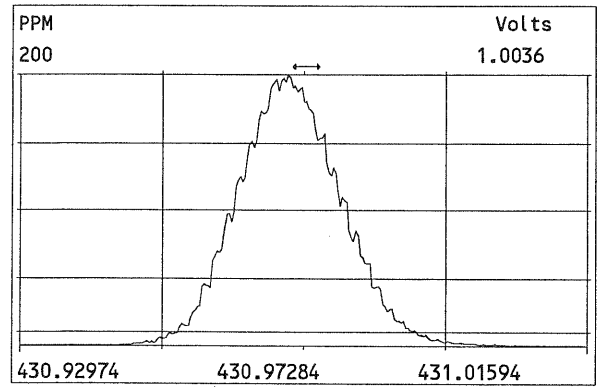


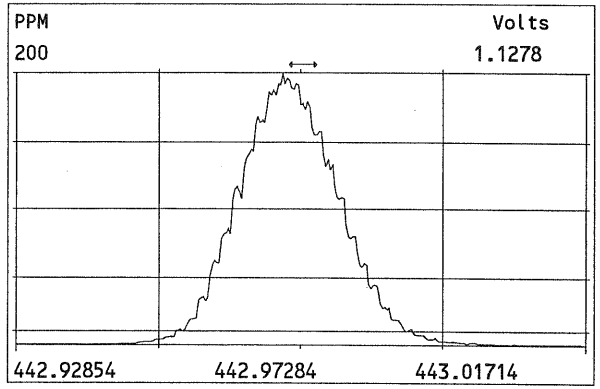


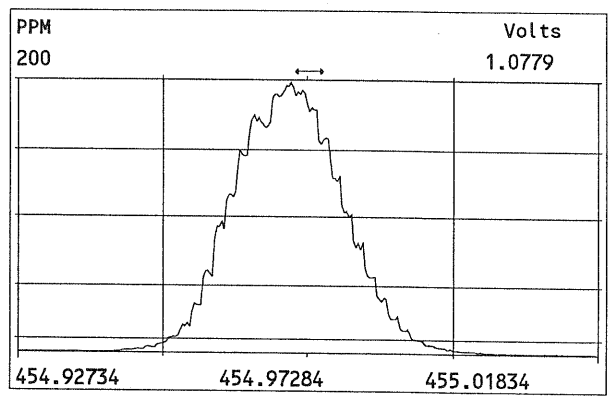


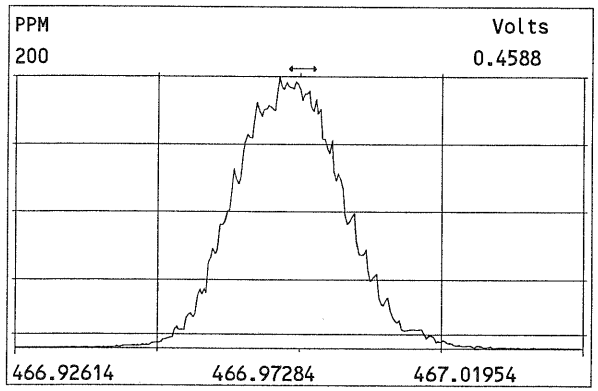


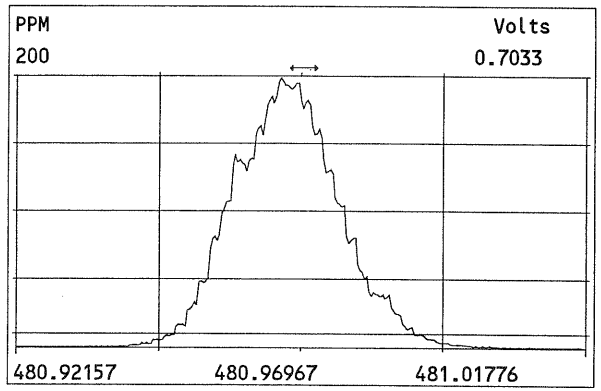
Peak Locate Examination:25-JUL-2006:14:41 File:25JUL06M
Experiment:PCDD Function:5 Reference:PFK

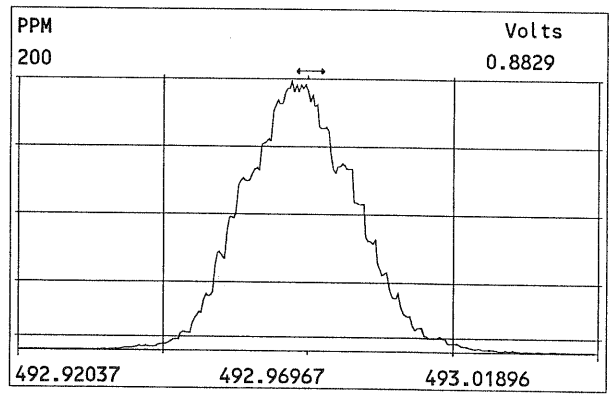


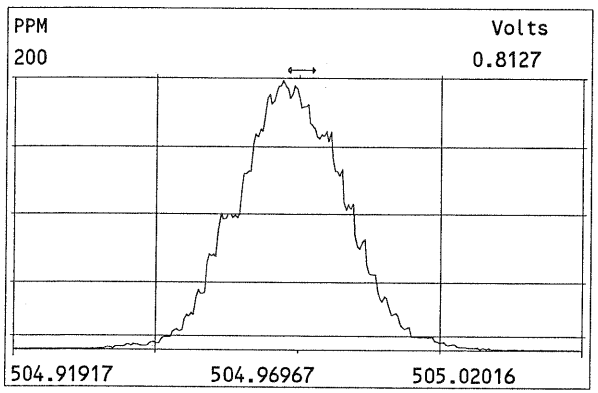


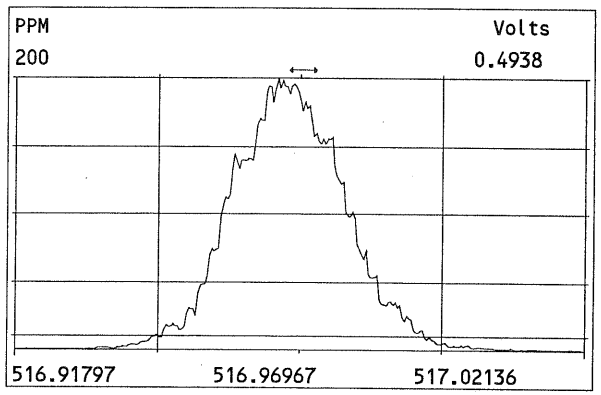




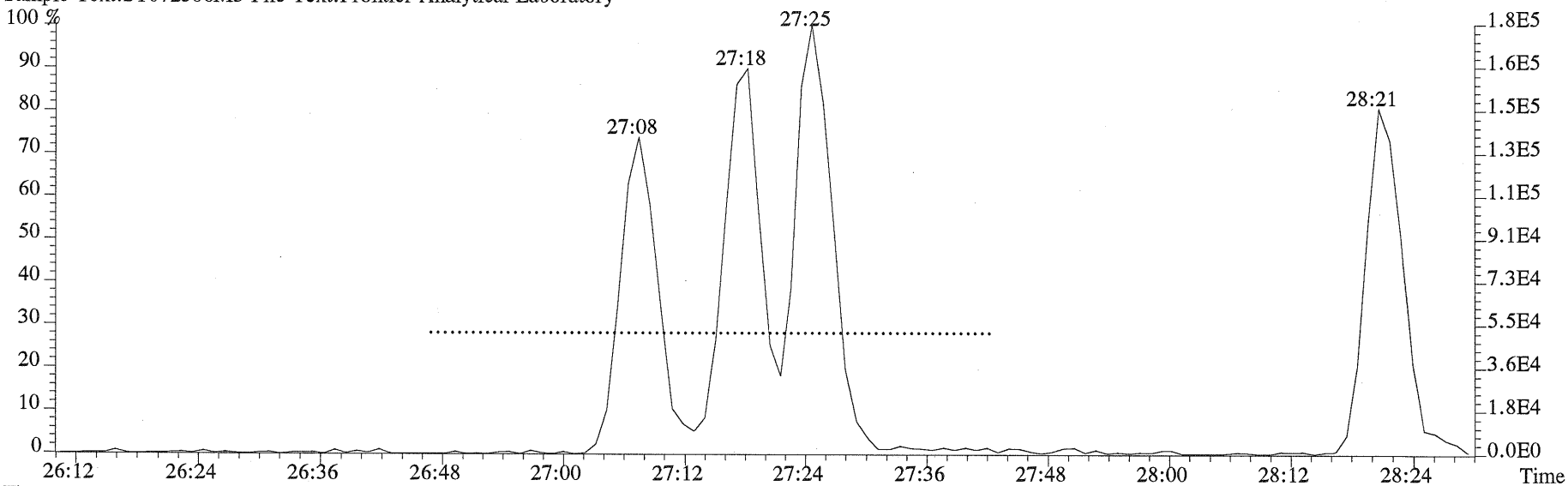




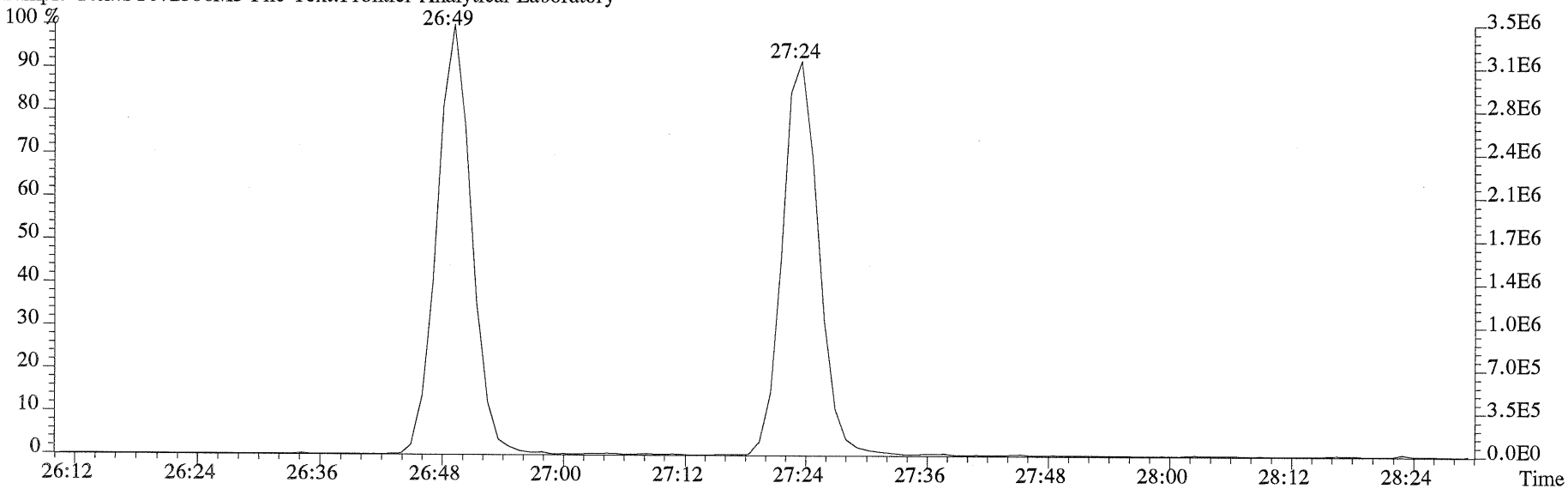




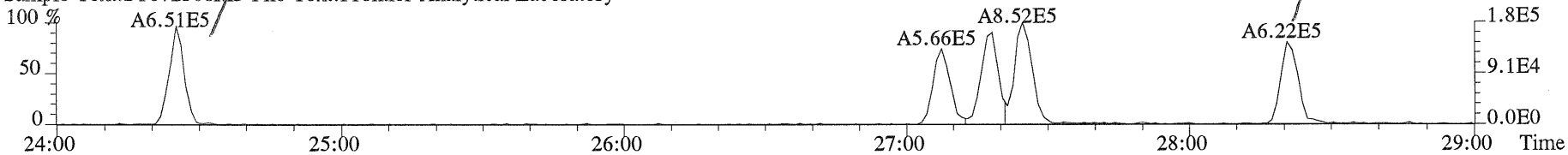
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:21 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:21 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



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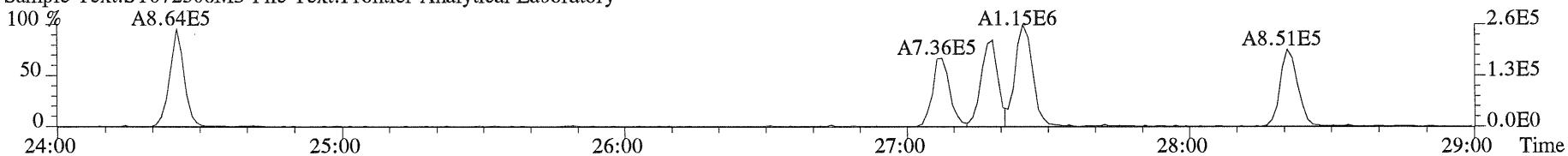
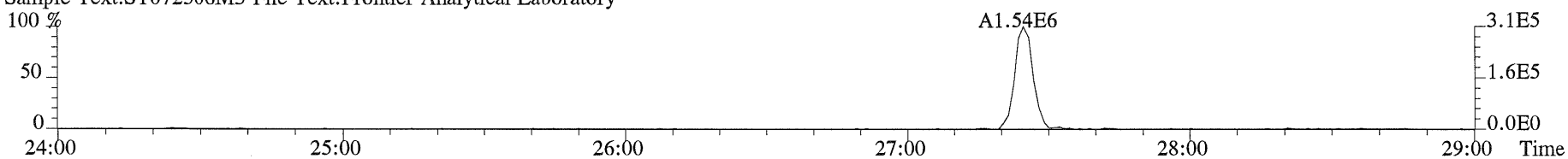
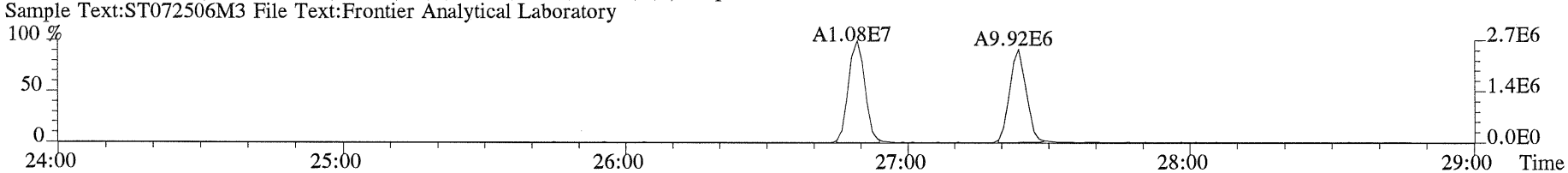
321.8936 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



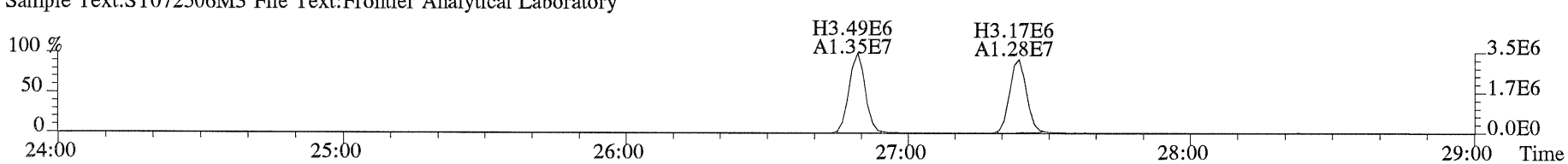
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

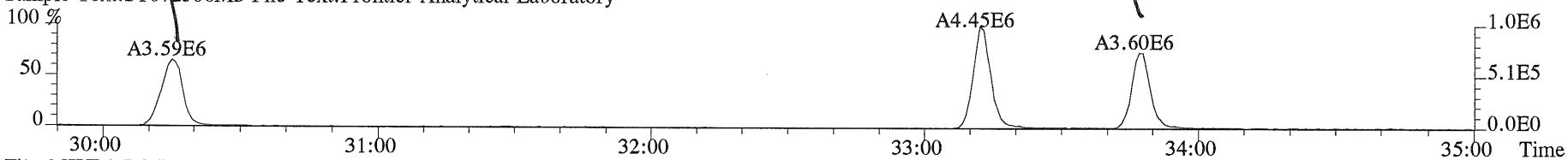


File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

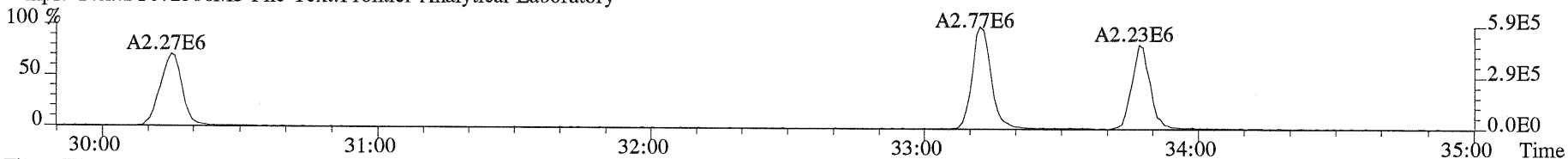


338

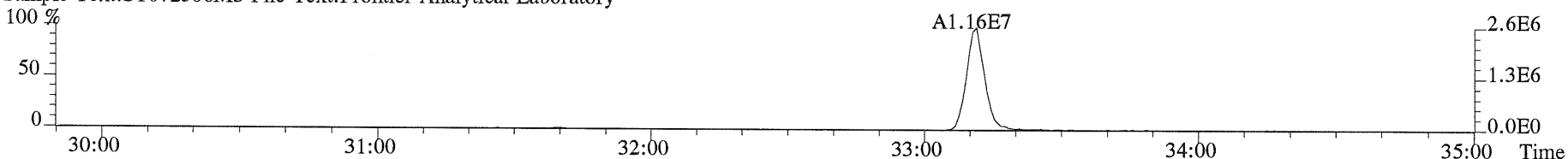
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



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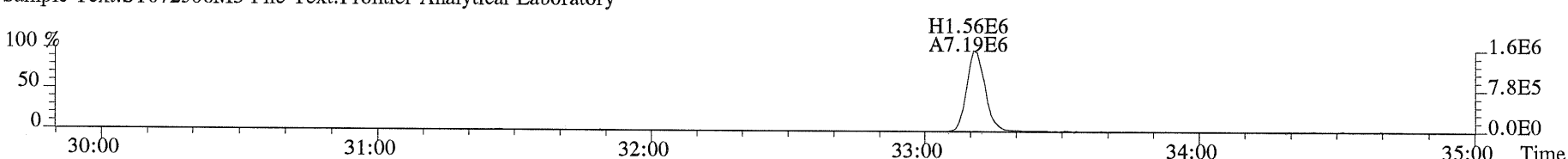
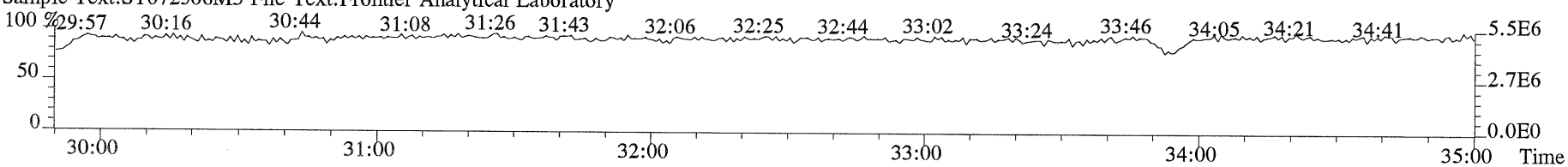
369.8919 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

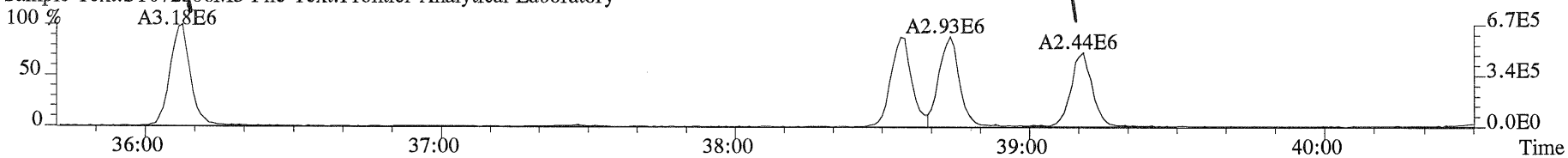


File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:21 F:2 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

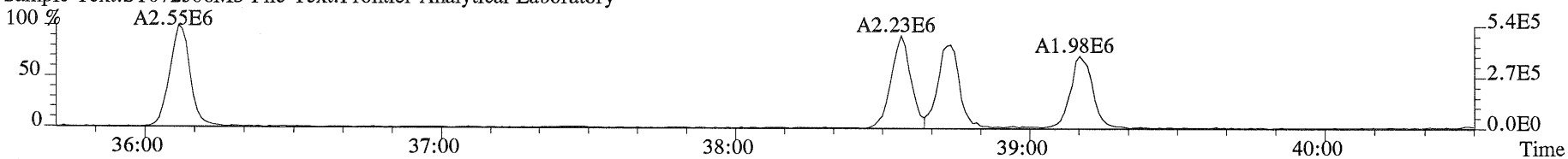


Klamath River Sediment Study

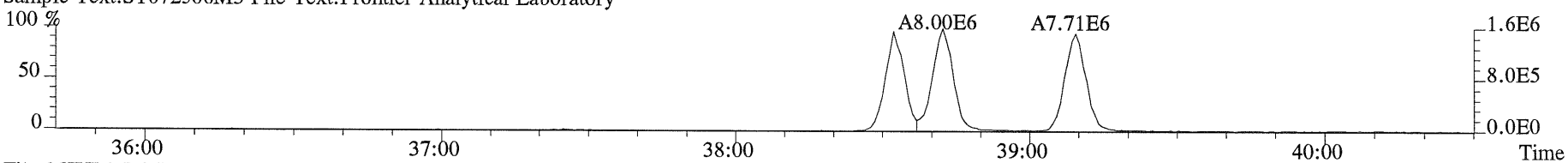
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



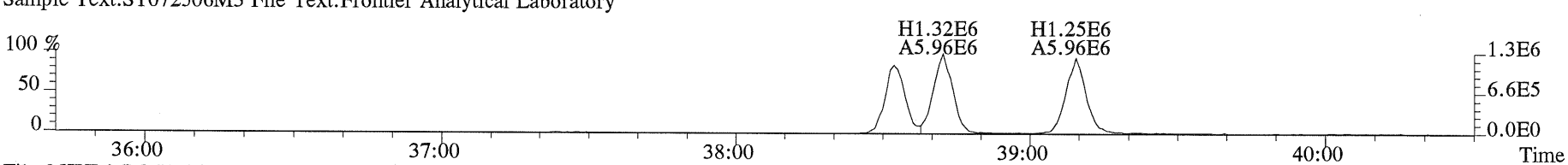
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



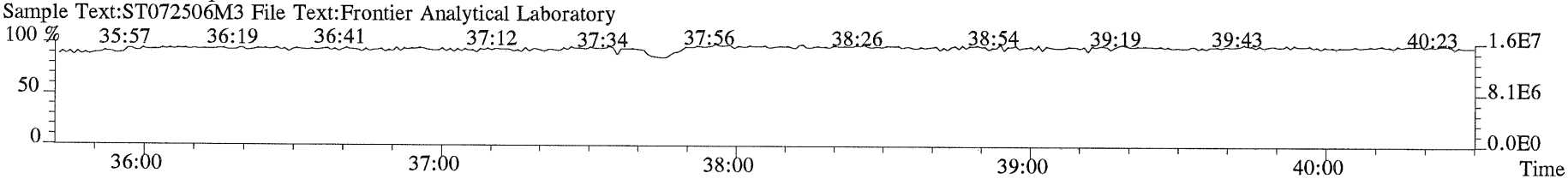
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



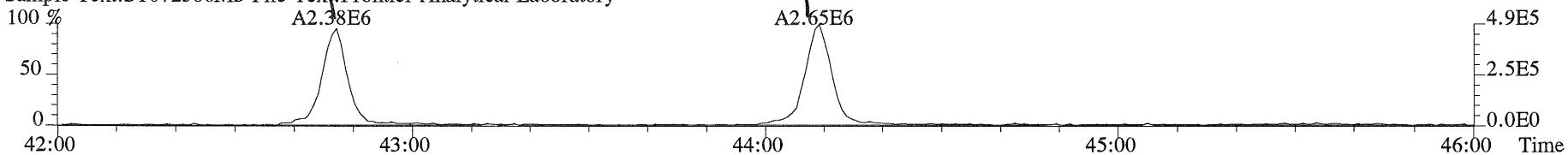
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



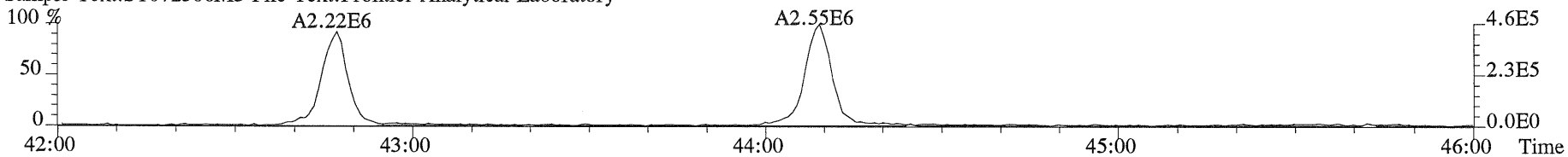
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:21 F:3 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



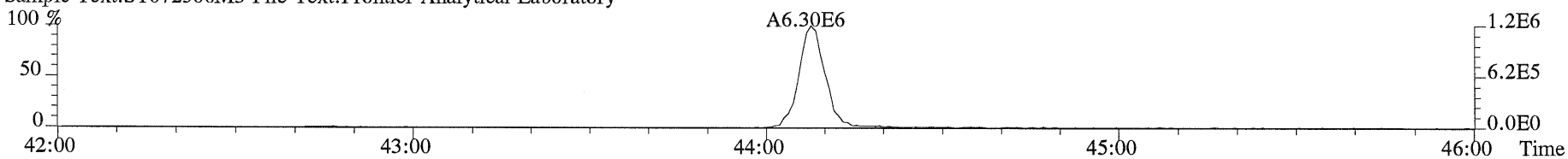
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



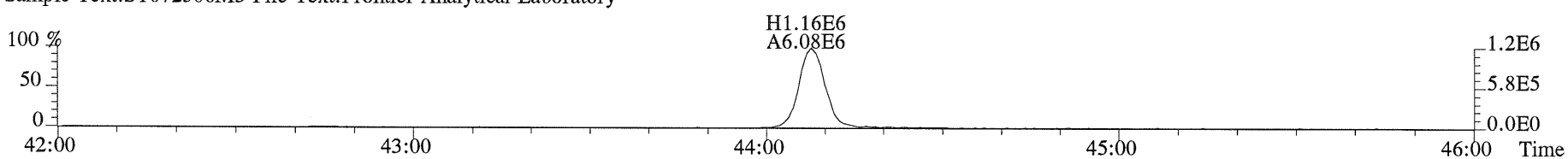
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



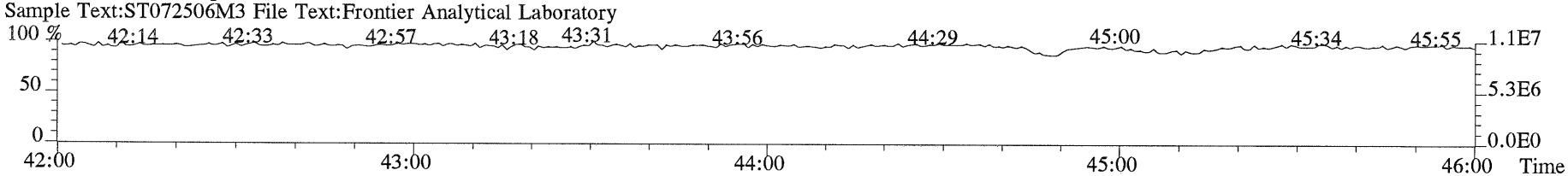
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



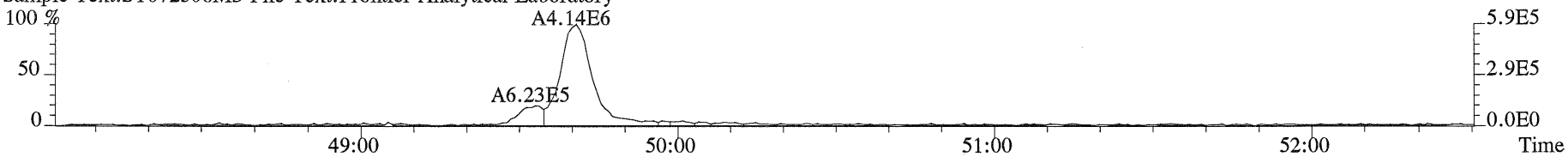
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



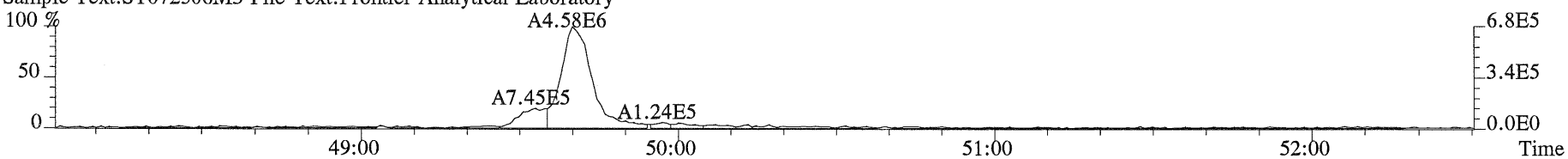
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:21 F:4 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



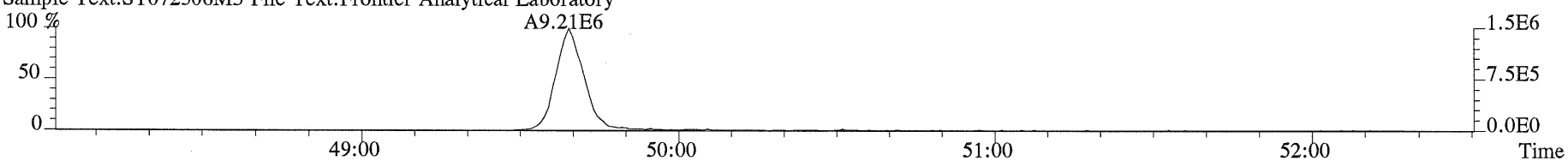
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

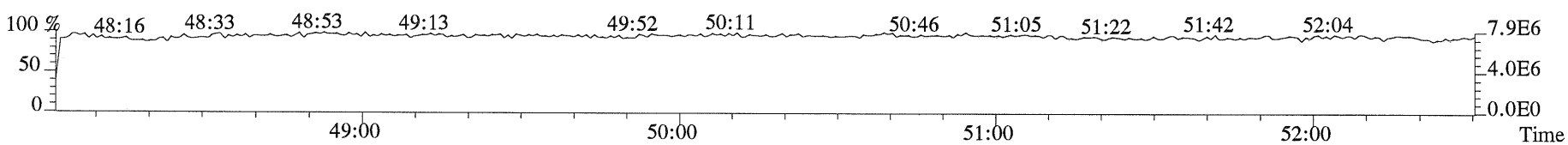


File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

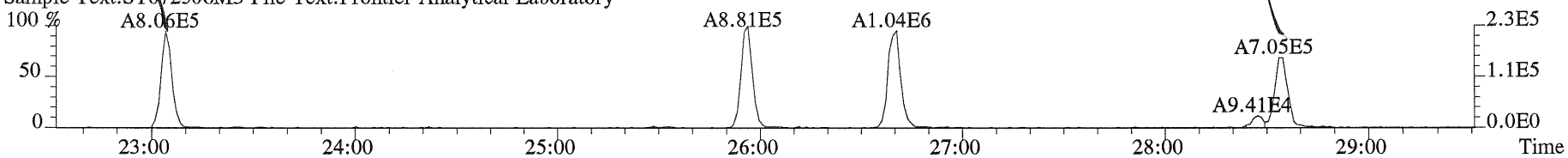


File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

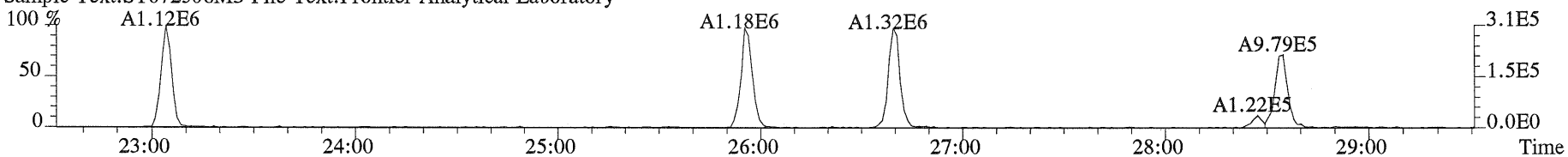
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:21 F:5 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



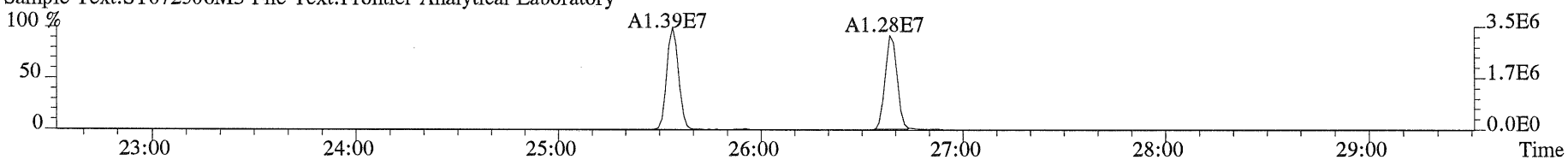
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



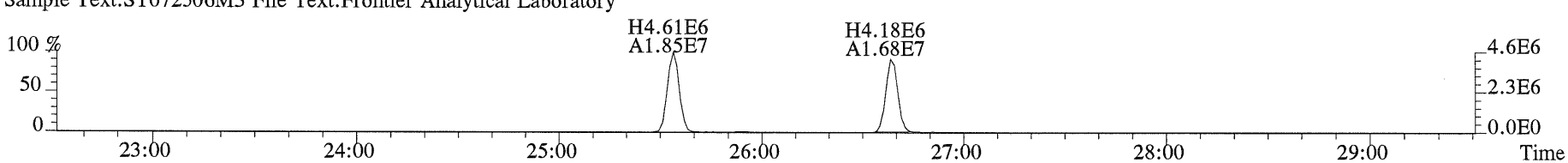
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



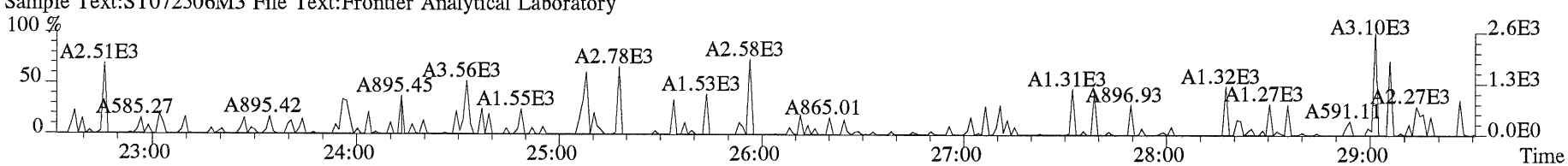
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

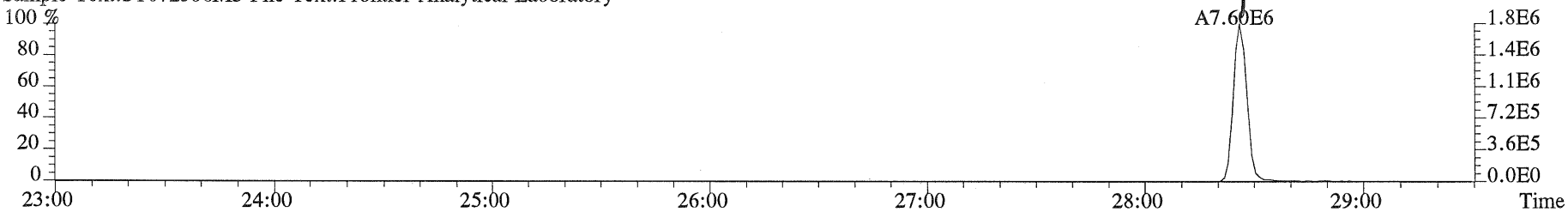


File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

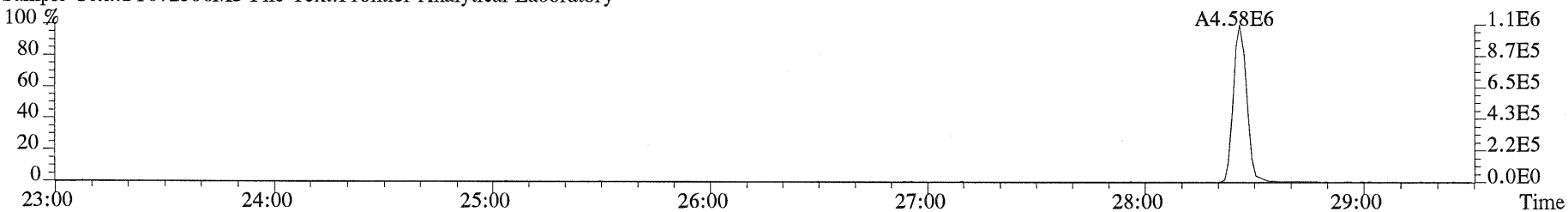


343

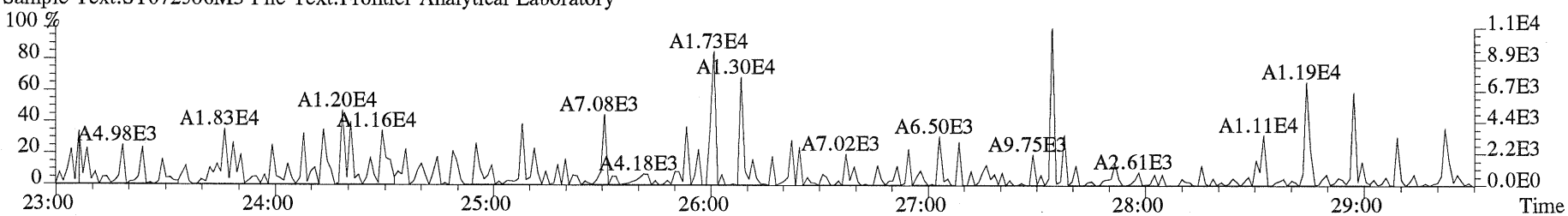
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



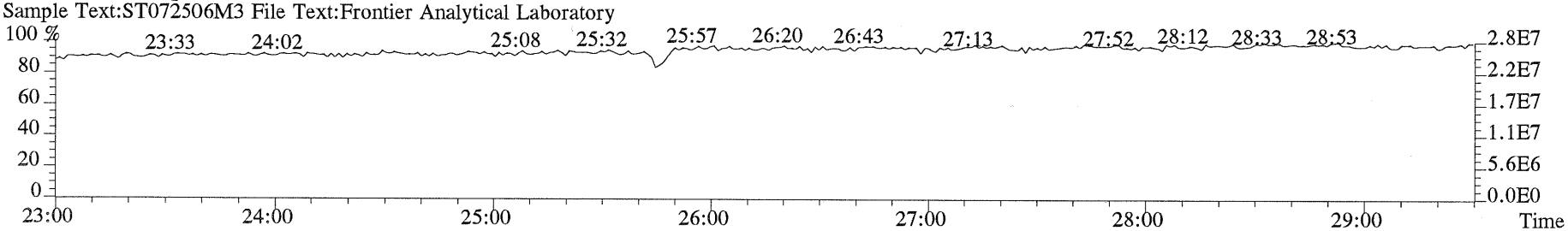
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

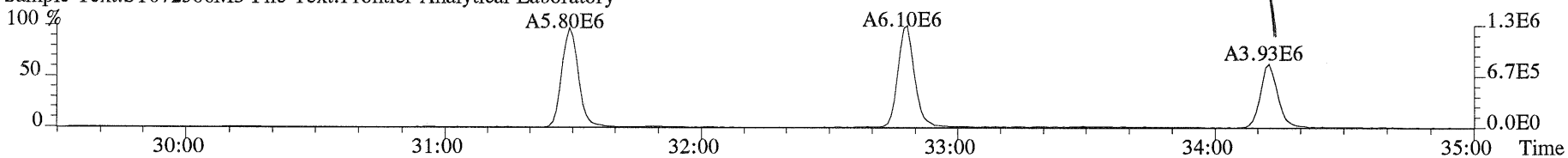


File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:21 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

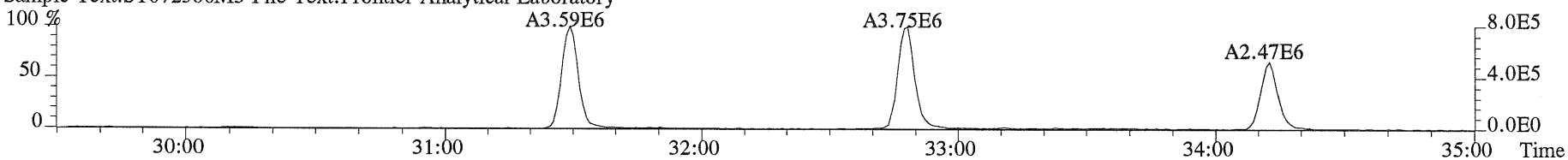


Klamath River Sediment Study

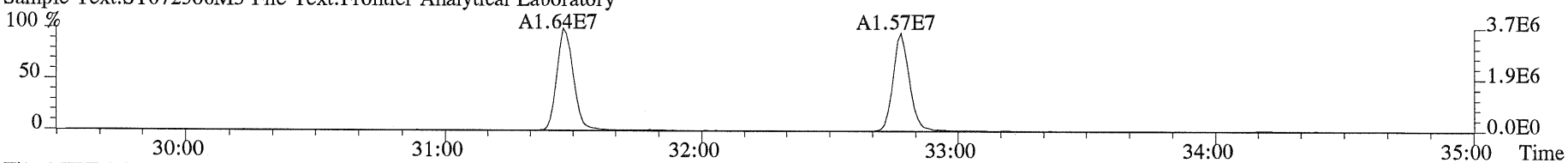
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



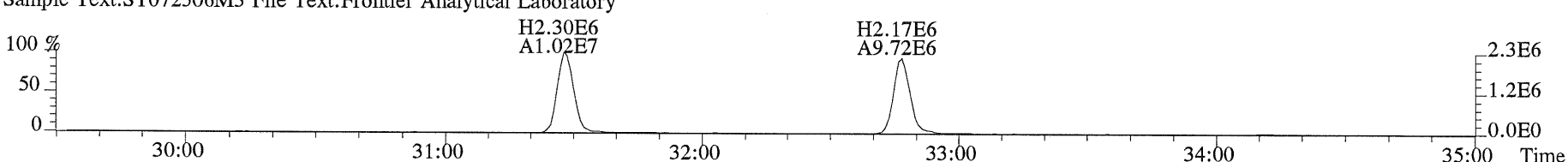
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



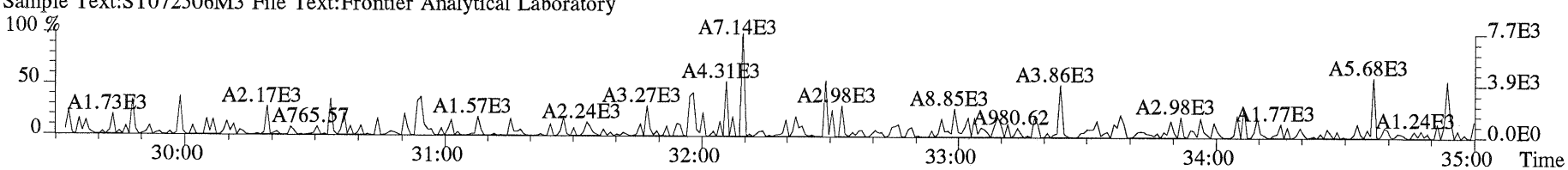
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



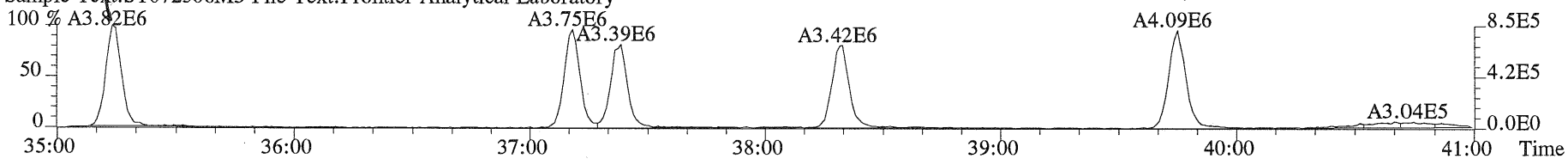
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



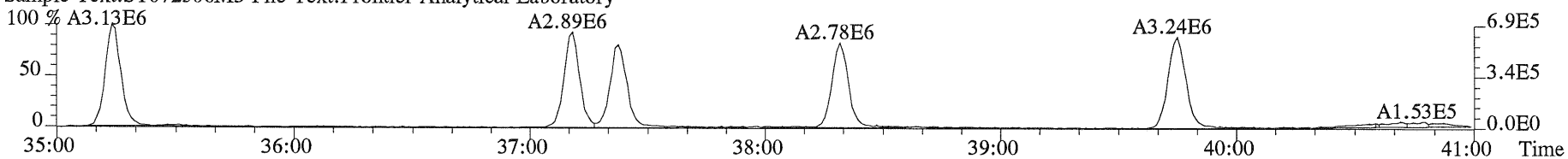
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



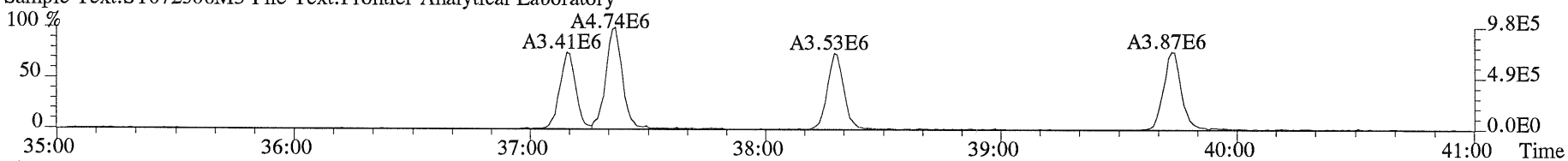
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



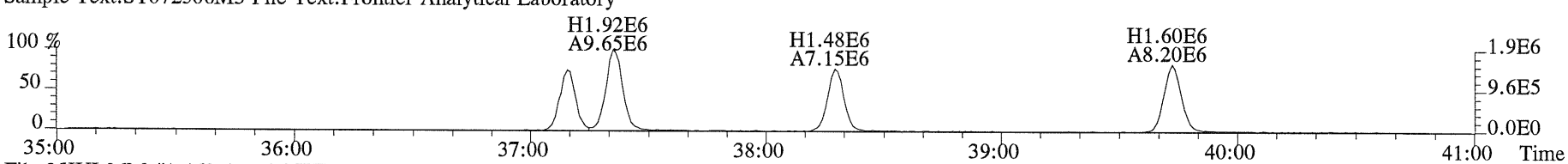
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



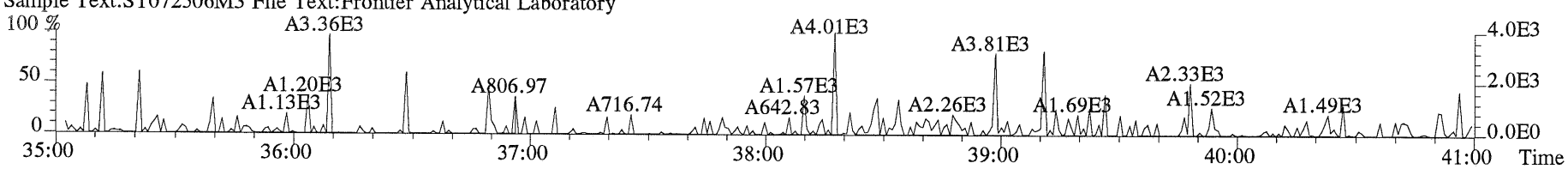
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



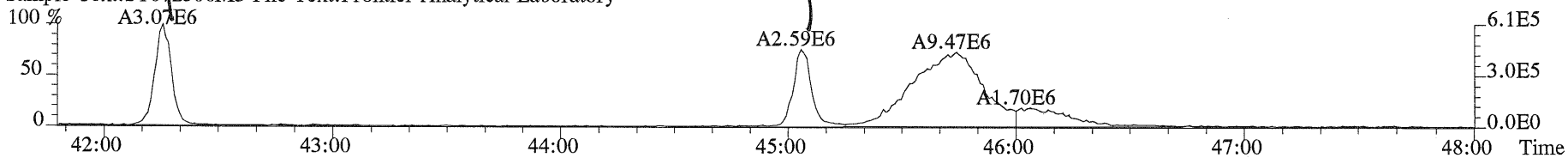
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



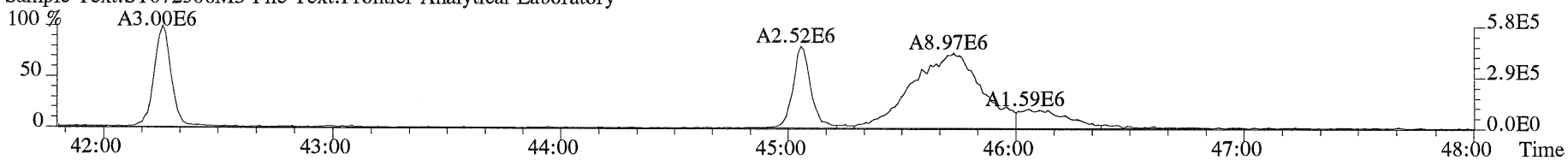
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



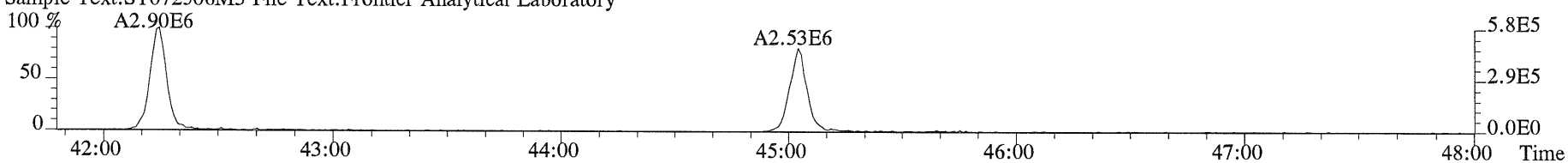
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



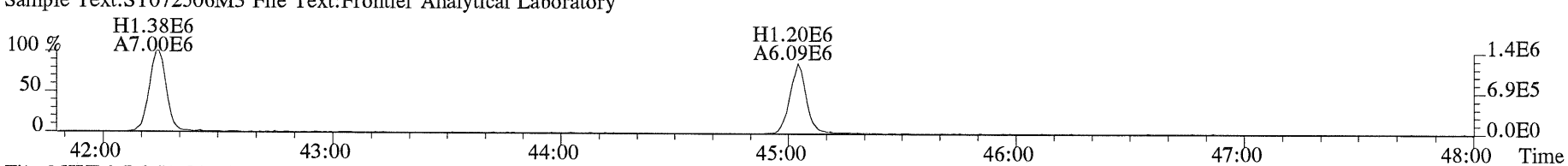
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



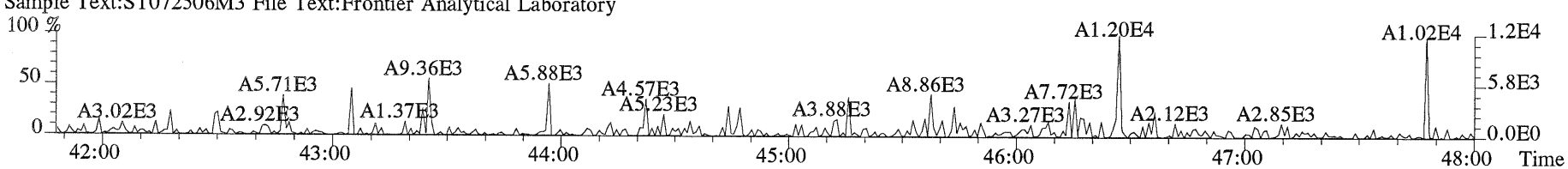
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



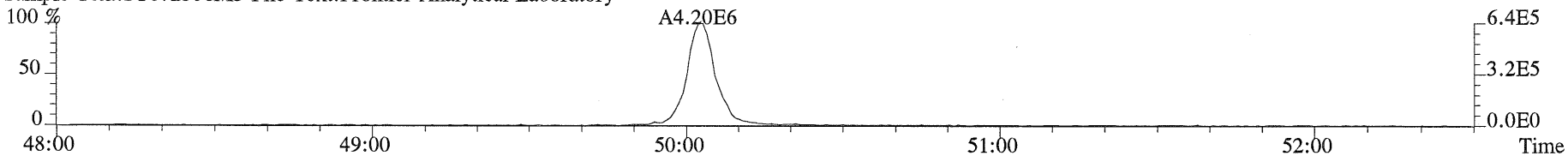
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



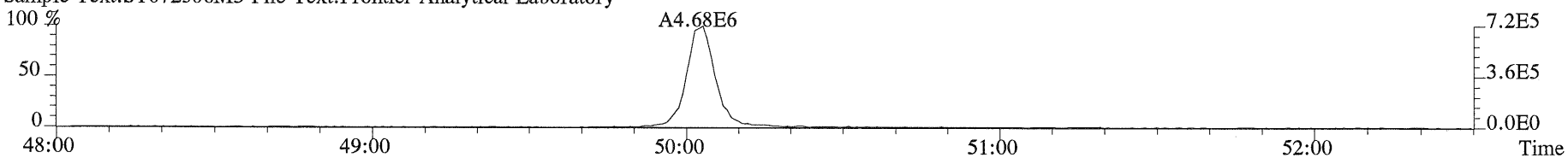
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



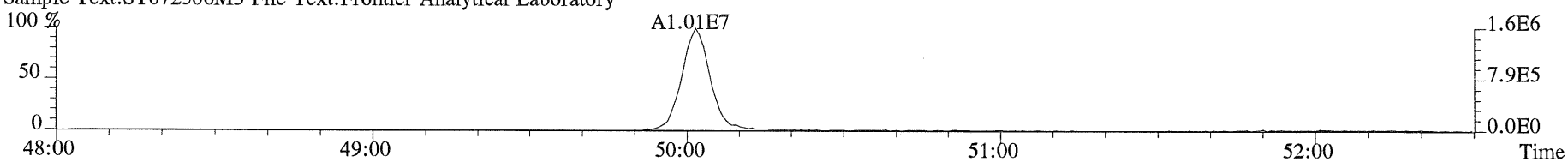
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



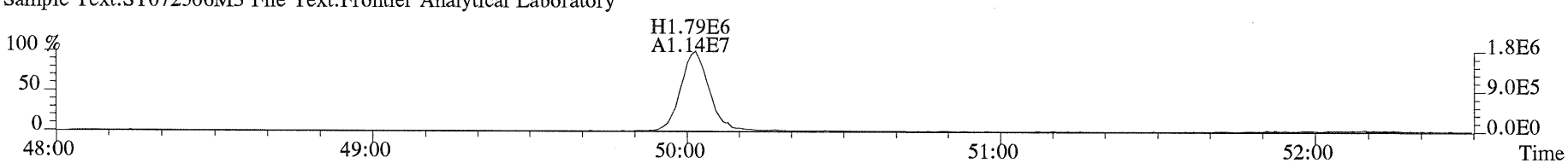
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



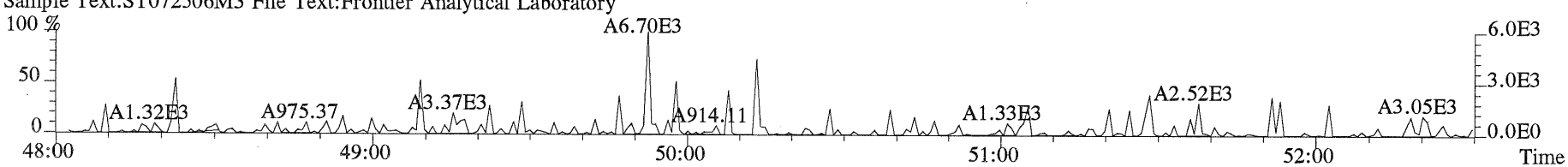
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



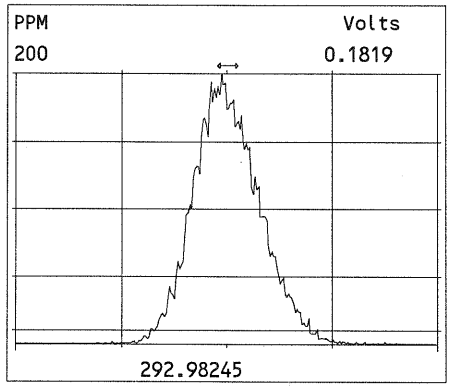
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

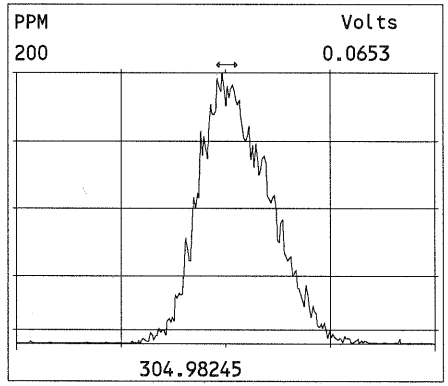


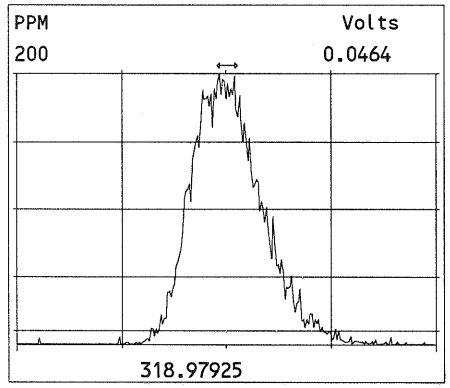
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

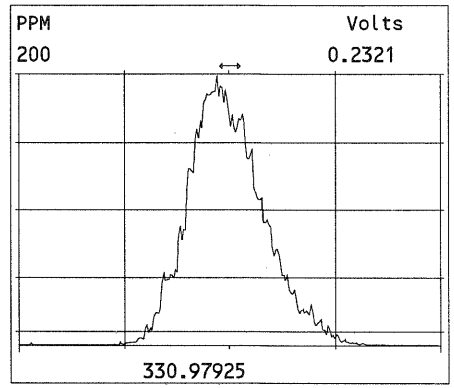


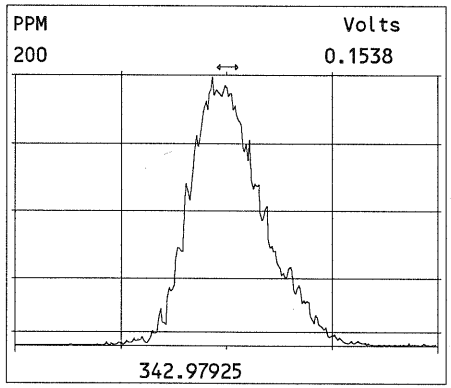
Peak Locate Examination:26-JUL-2006:10:12 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

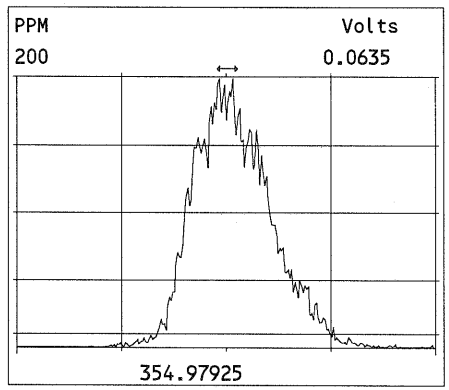


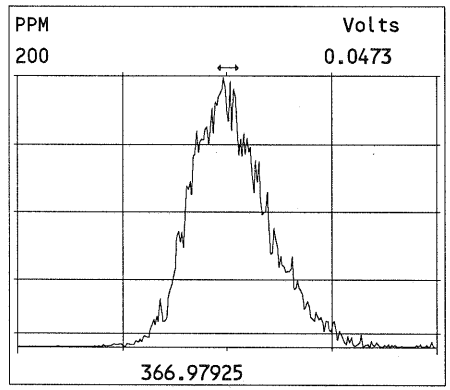


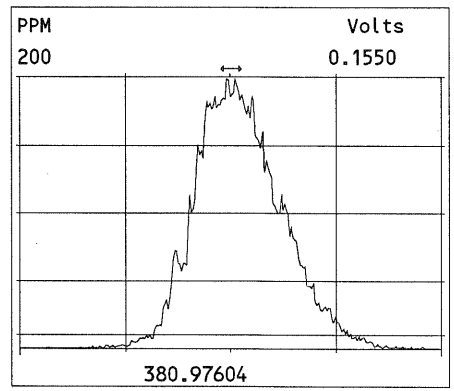


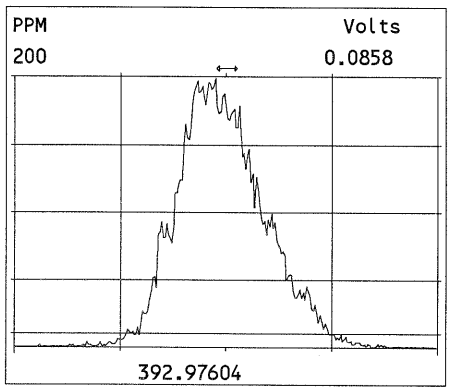


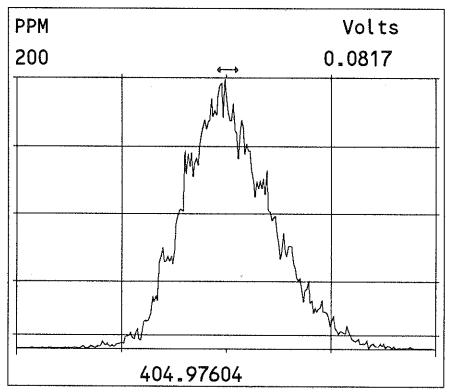


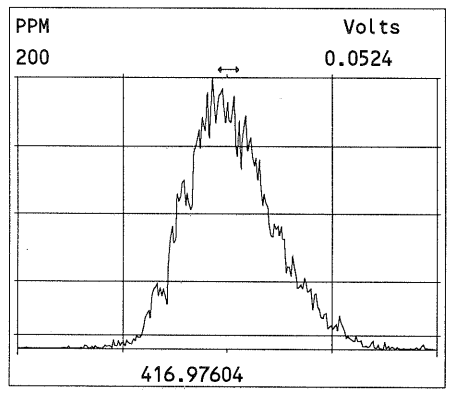




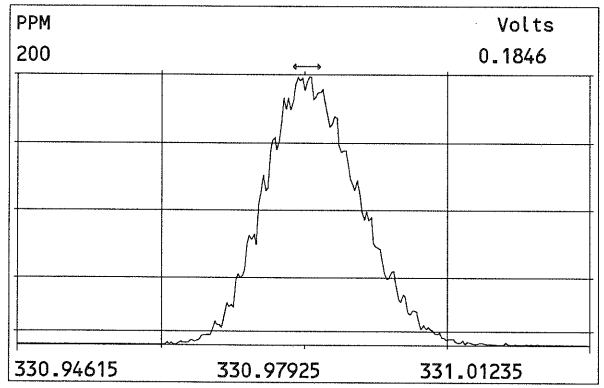


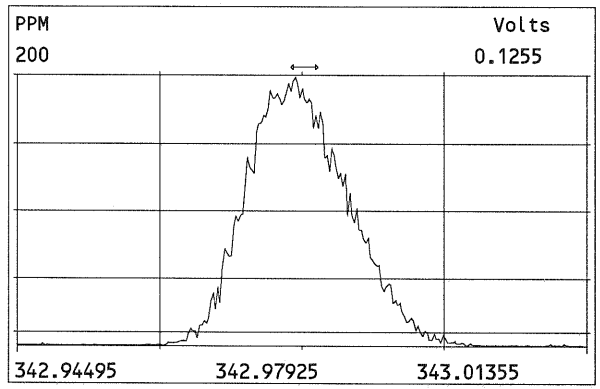


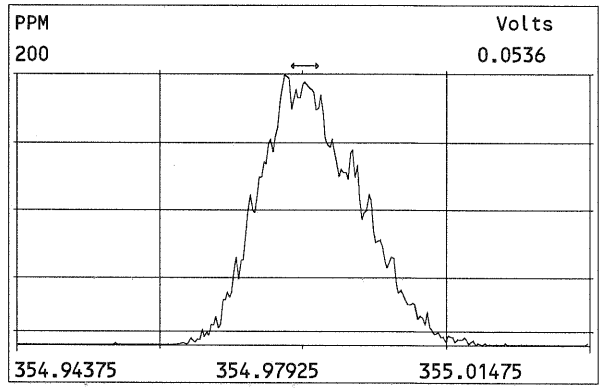


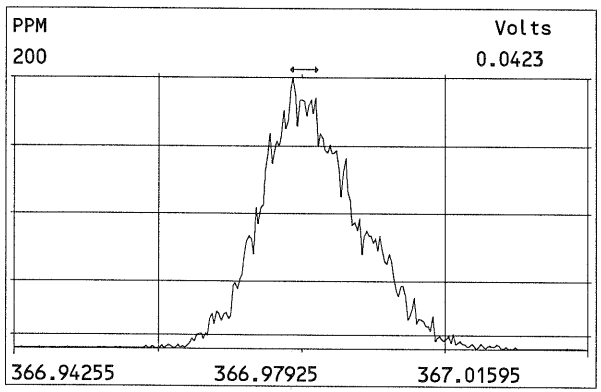


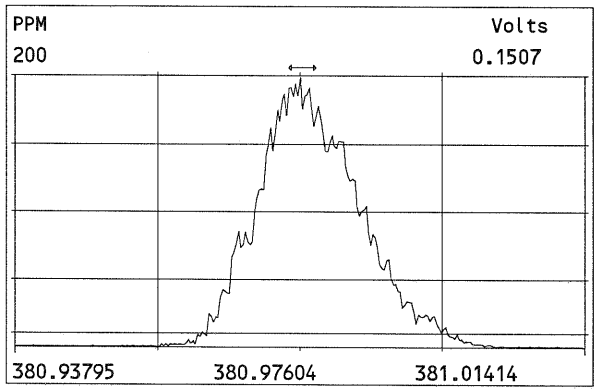
Peak Locate Examination:26-JUL-2006:10:14 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

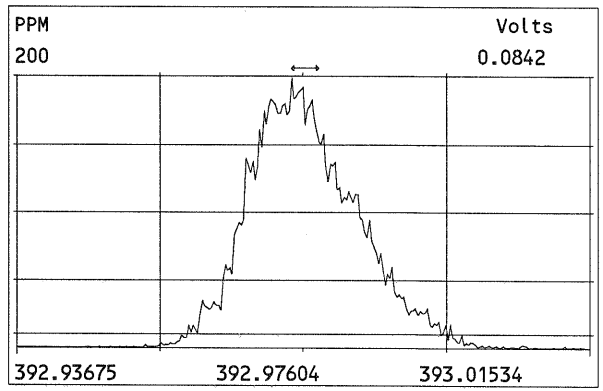


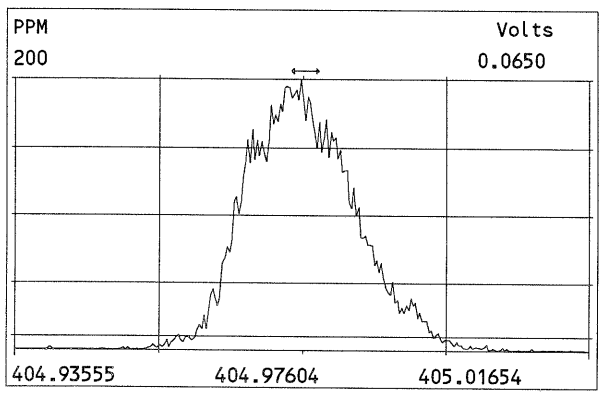


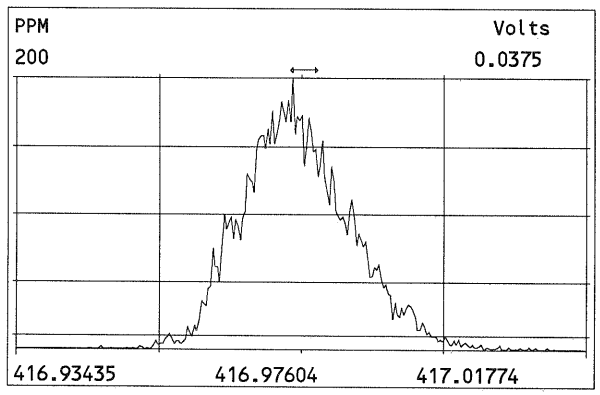






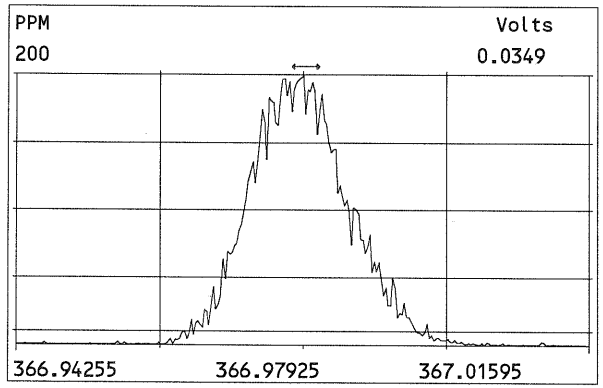


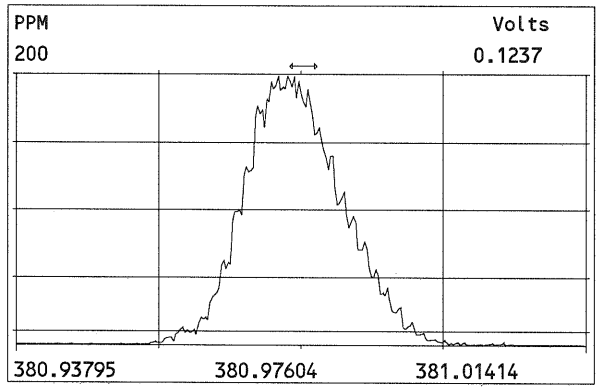


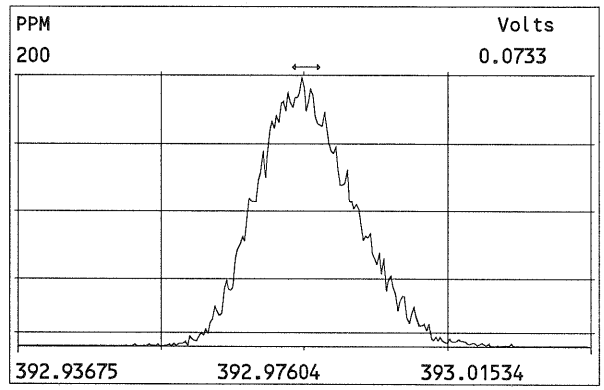


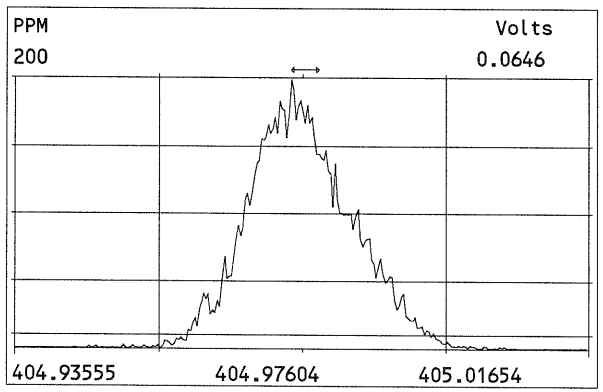
350

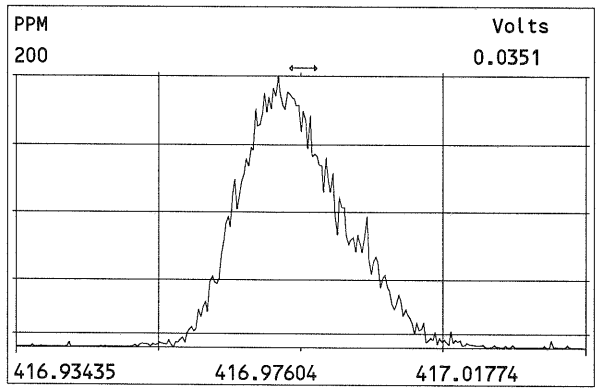
Peak Locate Examination:26-JUL-2006:10:16 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

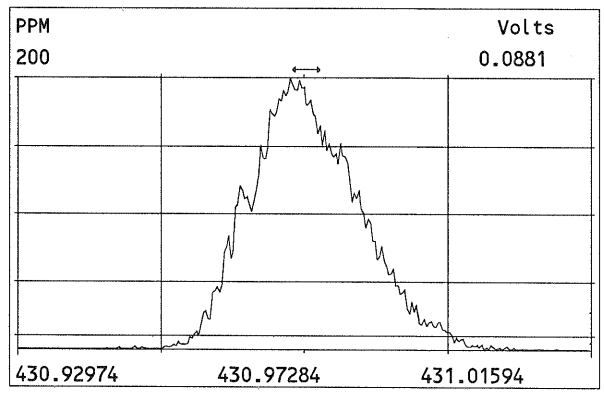


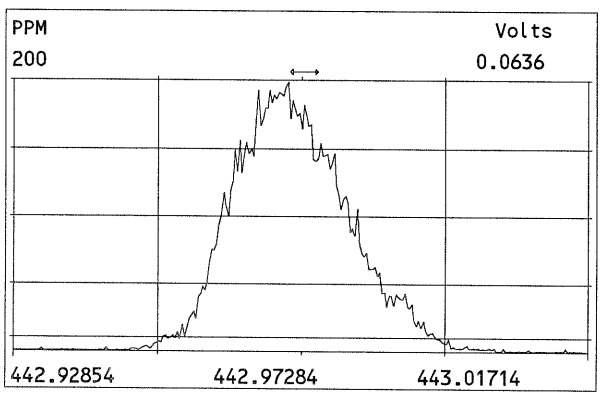


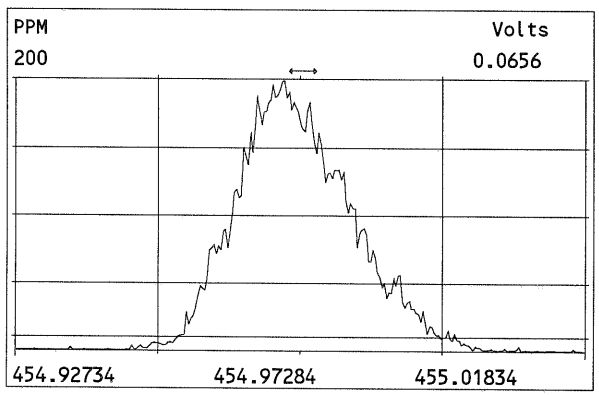




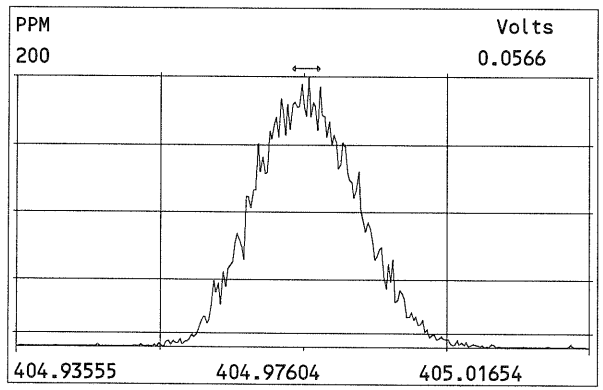


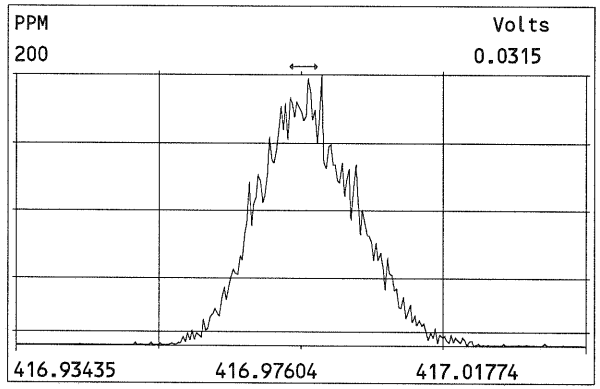


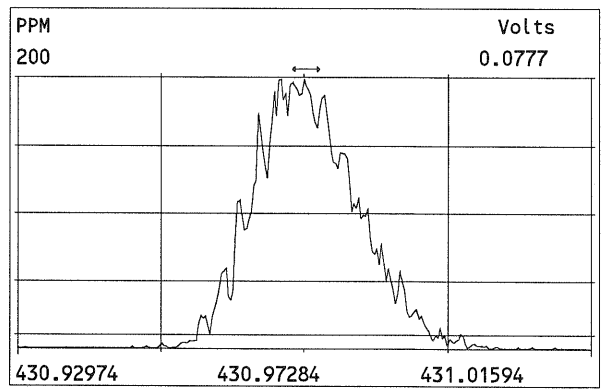


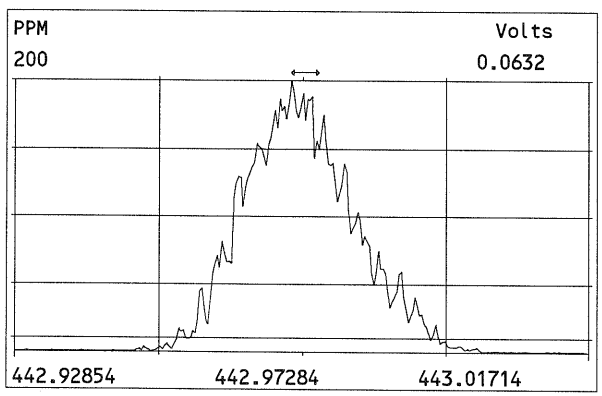


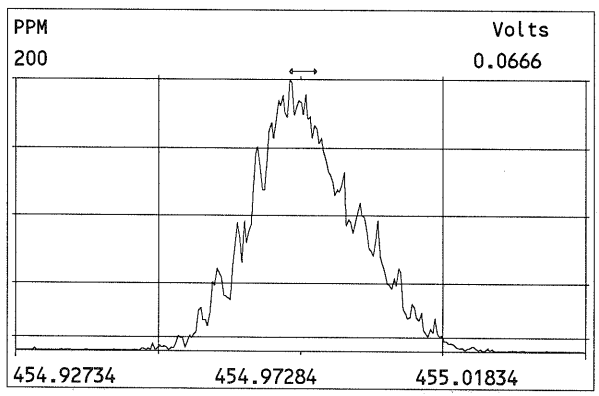
Peak Locate Examination:26-JUL-2006:10:18 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

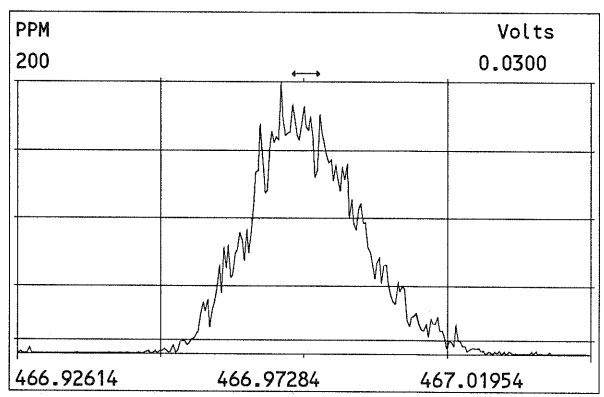


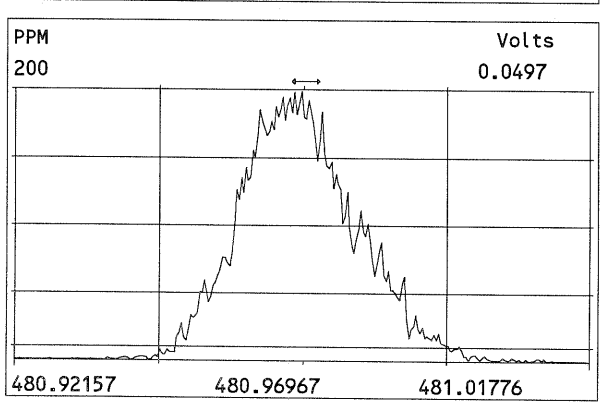




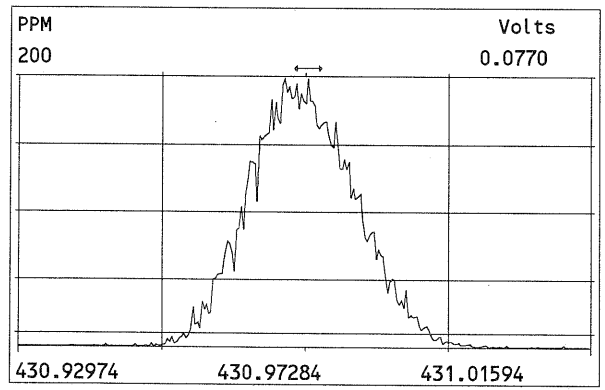


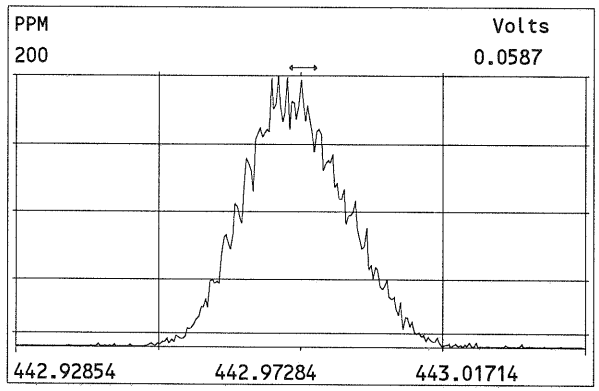


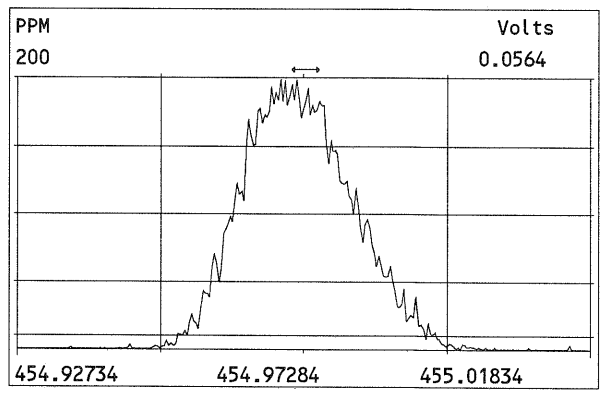


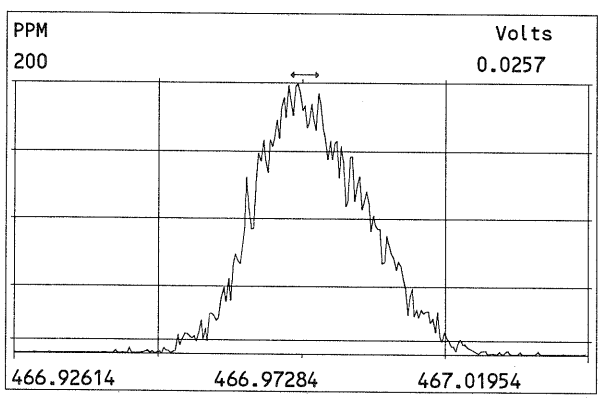


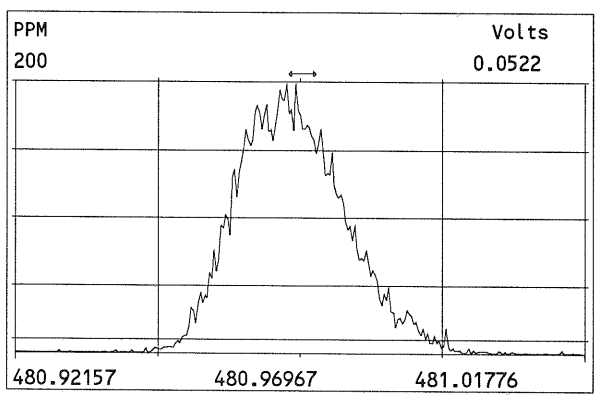
Peak Locate Examination:26-JUL-2006:10:20 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

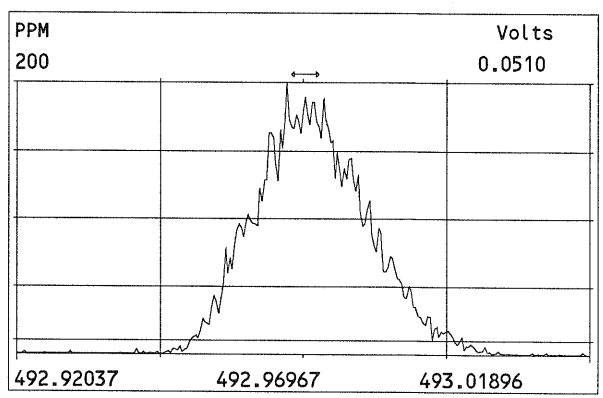


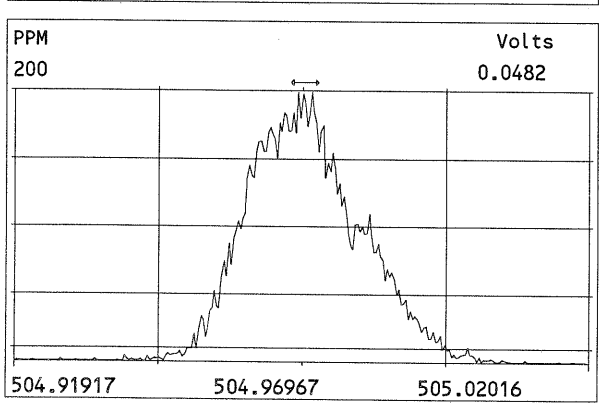


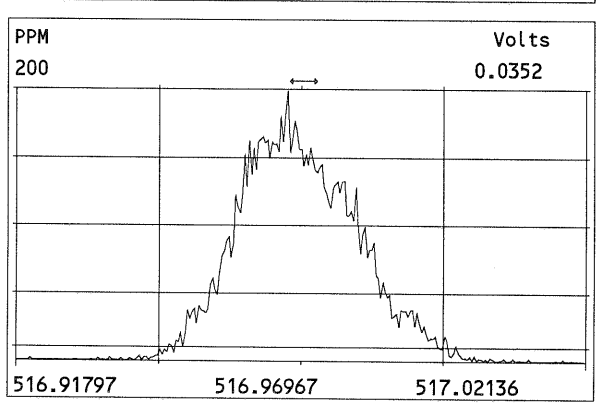












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 10:33:29

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.20	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	y	48.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	50.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.17	1.05-1.43	y	52.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	49.5	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	106	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	9.00	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	49.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.1	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	45.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.9	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	48.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	45.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	53.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	52.0	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	102	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 10:33:29

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	97.3	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	87.6	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	90.5	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	94.9	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	90.7	72.0 - 138
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	178	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	98.5	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	92.5	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	91.7	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	89.1	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.5	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	88.3	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	90.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	78.8	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	83.8	77.0 - 129
13C-OCDF	M+2/M+4	0.87	0.76-1.02	y	175	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.16	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: [signature] Date: 7/27/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 Time: 10:33:29

DB-5 IS Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 Time: 10:33:29

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:17	1,3,6,8-TCDF (F)	22:56
1,2,8,9-TCDD (L)	28:14	1,2,8,9-TCDF (L)	28:27
1,2,4,7,9-PeCDD (F)	30:08	1,3,4,6,8-PeCDF (F)	28:18
1,2,3,8,9-PeCDD (L)	33:41	1,2,3,8,9-PeCDF (L)	34:06
1,2,4,6,7,9-HxCDD (F)	36:00	1,2,3,4,6,8-HxCDF (F)	35:08
1,2,3,7,8,9-HxCDD (L)	39:04	1,2,3,7,8,9-HxCDF (L)	39:38
1,2,3,4,6,7,9-HpCDD (F)	42:40	1,2,3,4,6,7,8-HpCDF (F)	42:09
1,2,3,4,6,7,8-HpCDD (L)	44:03	1,2,3,4,7,8,9-HpCDF (L)	44:57

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 10:33:29 CS3 or VER Data Filename: 27JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.022	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.175	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.224	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 7/28/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 10:33:29 CS3 or VER Data Filename: 27JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.278	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FAL ID: ST072706M1 Filename: 27JUL06M Sam:1 Acquired: 27-JUL-06 10:33:29 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072706M1 EndCal: ST072706M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 96.2
WHO 1998 Tox: 120

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	9.77e+06	0.77 y	27:18	1.10	9.20		2.50	-	*	
1,2,3,7,8-PeCDD	3.61e+07	1.58 y	33:05	0.90	48.0		2.50	-	*	
1,2,3,4,7,8-HxCDD	2.55e+07	1.28 y	38:27	0.96	48.3		2.50	-	*	
1,2,3,6,7,8-HxCDD	2.89e+07	1.24 y	38:37	0.83	50.3		2.50	-	*	
1,2,3,7,8,9-HxCDD	2.54e+07	1.17 y	39:04	0.77	52.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	2.49e+07	1.03 y	44:03	0.86	49.5		2.50	-	*	
OCDD	3.92e+07	0.87 y	49:34	0.87	106		2.50	-	*	
2,3,7,8-TCDF	1.10e+07	0.76 y	26:33	0.99	9.00		2.50	-	*	
1,2,3,7,8-PeCDF	4.82e+07	1.55 y	31:22	0.80	49.1		2.50	-	*	
2,3,4,7,8-PeCDF	4.84e+07	1.56 y	32:41	0.88	48.1		2.50	-	*	
1,2,3,4,7,8-HxCDF	3.36e+07	1.26 y	37:05	1.42	45.8		2.50	-	*	
1,2,3,6,7,8-HxCDF	3.58e+07	1.23 y	37:15	0.97	47.9		2.50	-	*	
2,3,4,6,7,8-HxCDF	3.19e+07	1.20 y	38:13	1.26	48.3		2.50	-	*	
1,2,3,7,8,9-HxCDF	3.62e+07	1.27 y	39:38	1.34	45.5		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	3.16e+07	1.01 y	42:09	1.28	53.9		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	2.49e+07	1.08 y	44:57	1.22	52.0		2.50	-	*	
OCDF	4.41e+07	0.90 y	49:56	0.90	102		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	9.66e+07	0.78 y	27:16	1.00	97.3					97.3
13C-1,2,3,7,8-PeCDD	8.33e+07	1.59 y	33:04	0.96	87.6					87.6
13C-1,2,3,4,7,8-HxCDD	5.51e+07	1.28 y	38:26	0.90	90.5					90.5
13C-1,2,3,6,7,8-HxCDD	6.94e+07	1.31 y	38:35	1.09	94.9					94.9
13C-1,2,3,4,6,7,8-HpCDD	5.85e+07	1.06 y	44:02	0.96	90.7					90.7
13C-OCDD	8.53e+07	0.91 y	49:32	0.71	178					88.8
13C-2,3,7,8-TCDF	1.23e+08	0.78 y	26:32	0.94	98.5					98.5
13C-1,2,3,7,8-PeCDF	1.23e+08	1.58 y	31:21	1.00	92.5					92.5
13C-2,3,4,7,8-PeCDF	1.15e+08	1.59 y	32:40	0.94	91.7					91.7
13C-1,2,3,4,7,8-HxCDF	5.15e+07	0.53 y	37:03	0.86	89.1					89.1
13C-1,2,3,6,7,8-HxCDF	7.72e+07	0.51 y	37:15	1.23	93.5					93.5
13C-2,3,4,6,7,8-HxCDF	5.25e+07	0.54 y	38:11	0.88	88.3					88.3
13C-1,2,3,7,8,9-HxCDF	5.96e+07	0.52 y	39:37	0.98	90.2					90.2
13C-1,2,3,4,6,7,8-HpCDF	4.58e+07	0.43 y	42:08	0.86	78.8					78.8
13C-1,2,3,4,7,8,9-HpCDF	3.95e+07	0.42 y	44:56	0.70	83.8					83.8
13C-OCDF	9.66e+07	0.87 y	49:54	0.82	175					87.5
37Cl-2,3,7,8-TCDD	6.56e+06		27:18	0.81	8.16					81.6
13C-1,2,3,4-TCDD	9.94e+07	0.79 y	26:41	-	51.9					
13C-1,2,3,4-TCDF	1.33e+08	0.77 y	25:26	-	46.2					
13C-1,2,3,7,8,9-HxCDD	6.73e+07	1.22 y	39:02	-	45.1					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	4.05e+07		23:09	1.10	38.1		2.50	-	*	28
Total Penta-Dioxins	9.95e+07		30:08	0.90	132		2.50	-	*	25
Total Hexa-Dioxins	1.15e+08		36:00	0.85	218		2.50	-	*	35
Total Hepta-Dioxins	4.91e+07		41:22	0.86	97.6		2.50	-	*	37
Total Tetra-Furans	4.38e+07		22:56	0.99	35.9		2.50	-	*	27
1st Fn. Tot Penta-Furans	5.48e+07		28:18	0.84	55.1		2.50	-	*	4 PeCDF
Total Penta-Furans	1.33e+08		30:03	0.84	134		2.50	-	*	20 189
Total Hexa-Furans	1.68e+08		35:08	1.22	229		2.50	-	*	32
Total Hepta-Furans	6.05e+07		42:09	1.25	113		2.50	-	*	40

Analyst: _____ Date: 7/28/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:27JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

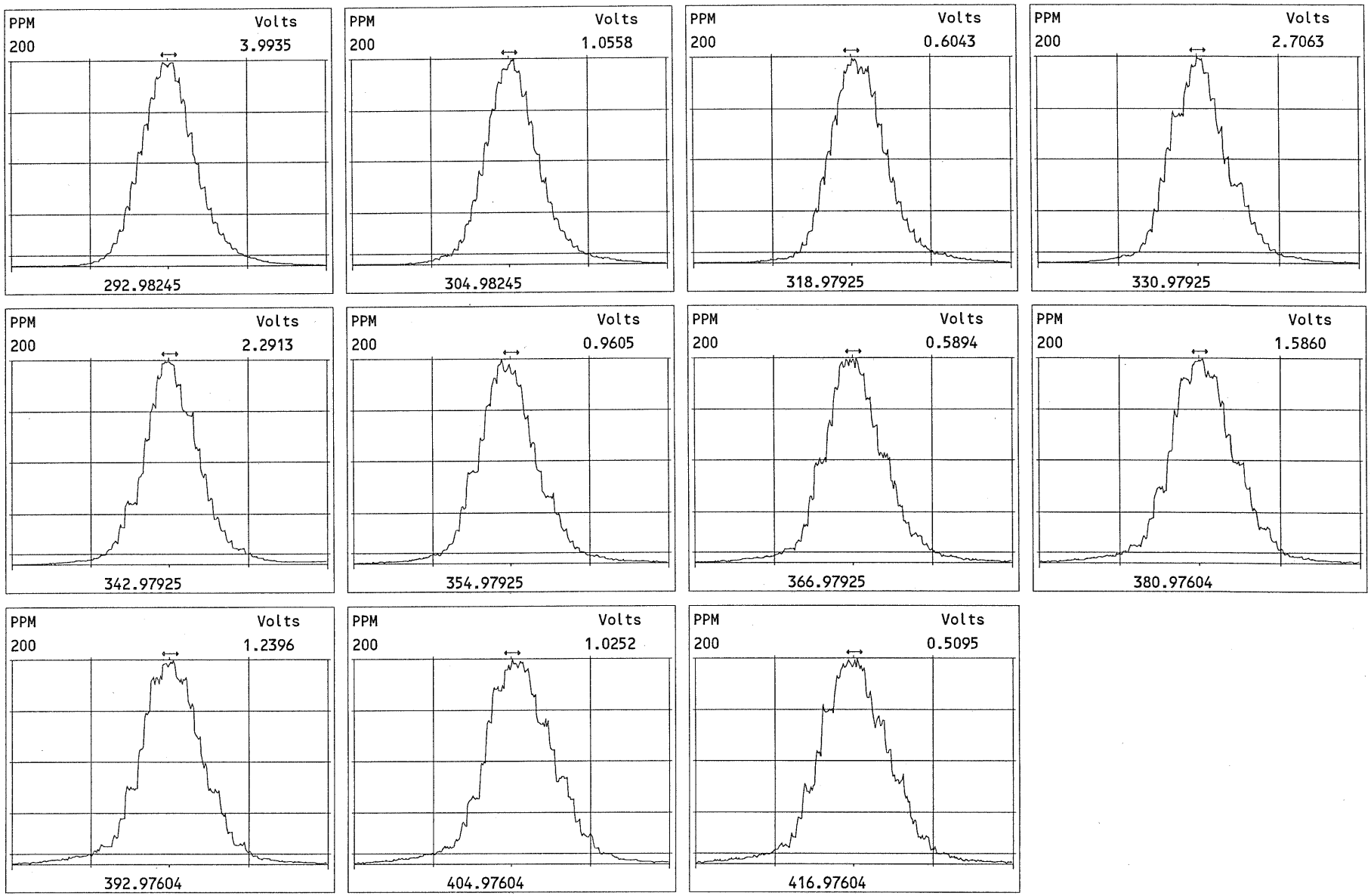
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
27JUL06M	1	ST072706M1	1613 CS3 (051212J)	27-JUL-06 10:33:29	ST072706M1	ST072706M2	TC
27JUL06M	2	3956-001-0001-SA	IG7-S1	27-JUL-06 11:28:52	ST072706M1	ST072706M2	TC
27JUL06M	3	3963-001-0001-SA	061409-08	27-JUL-06 12:24:11	ST072706M1	ST072706M2	TC
27JUL06M	4	3963-002-0001-SA	061409-09	27-JUL-06 13:19:31	ST072706M1	ST072706M2	TC
27JUL06M	5	3963-003-0001-SA	061409-10	27-JUL-06 14:14:54	ST072706M1	ST072706M2	TC
27JUL06M	6	3967-001-0001-SA	C-4, S-1	27-JUL-06 15:10:18	ST072706M1	ST072706M2	TC
27JUL06M	7	SB072706M1	Solvent Blank	27-JUL-06 16:05:42	ST072706M1	ST072706M2	TC
27JUL06M	8	ST072706M2	1613 CS3 (051212J)	27-JUL-06 17:01:01	ST072706M2	ST072706M3	TC

7/28/06

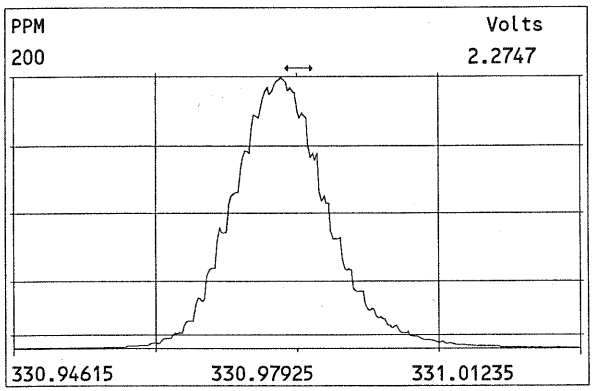
Data Backed Up:_____

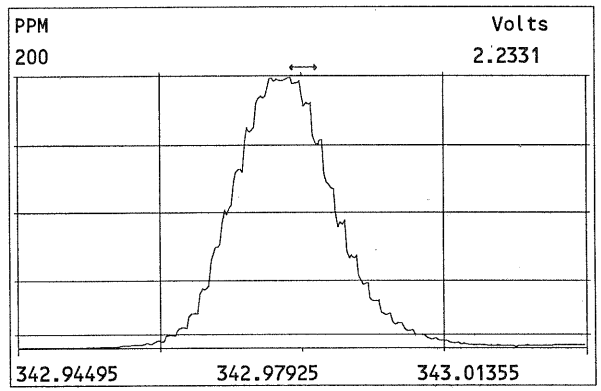
Date:_____

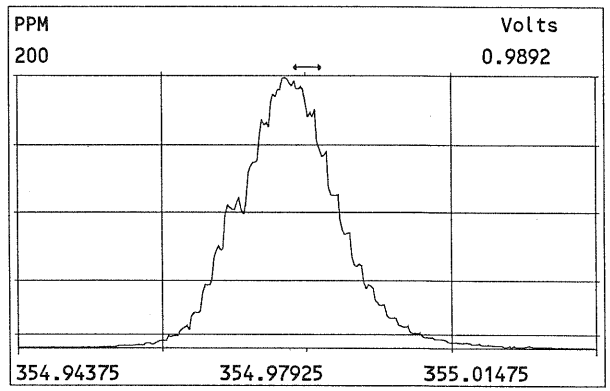
Peak Locate Examination:27-JUL-2006:10:31 File:27JUL06M
Experiment:PCDD Function:1 Reference:PFK

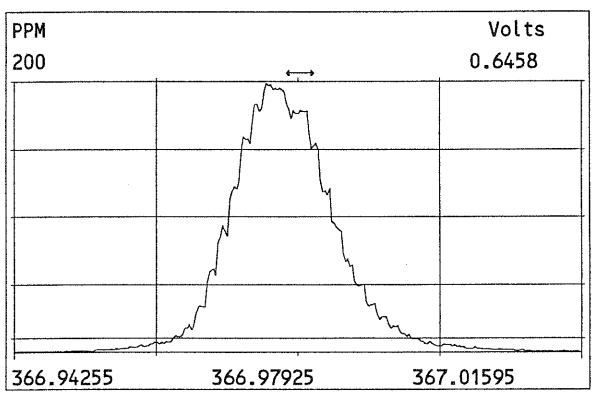


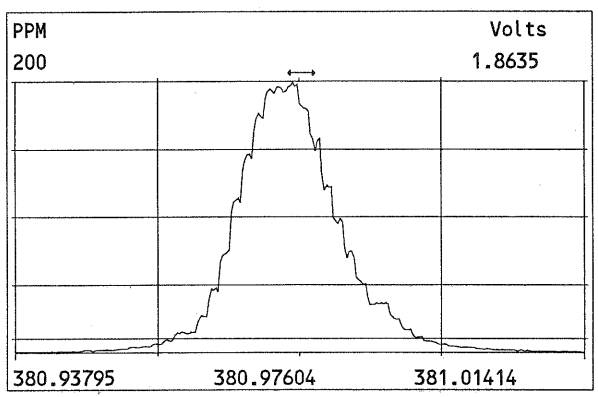
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:2 Reference:PFK

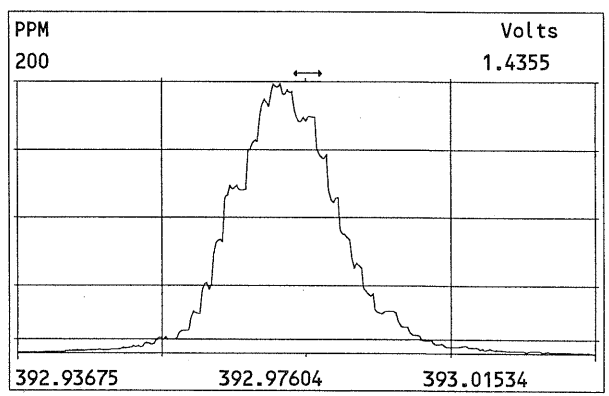


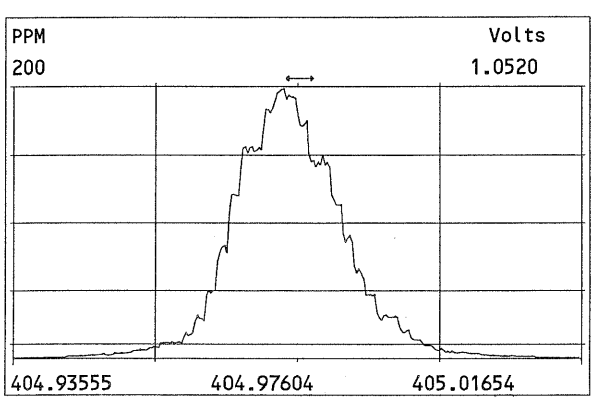


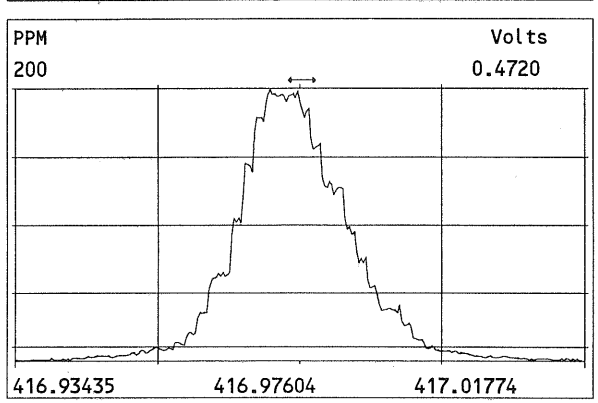




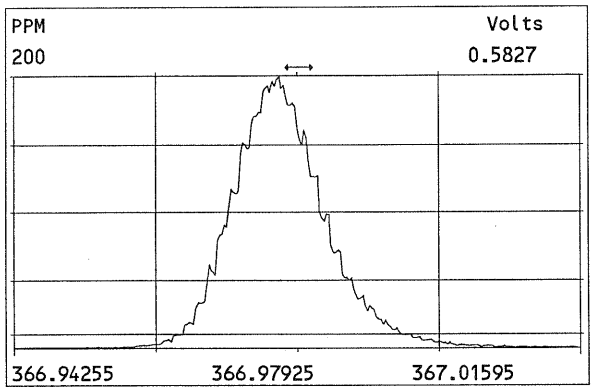


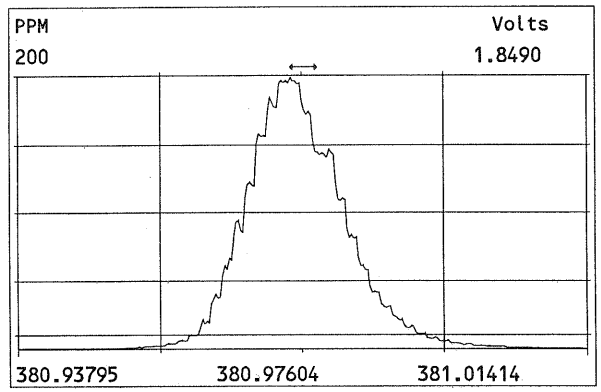


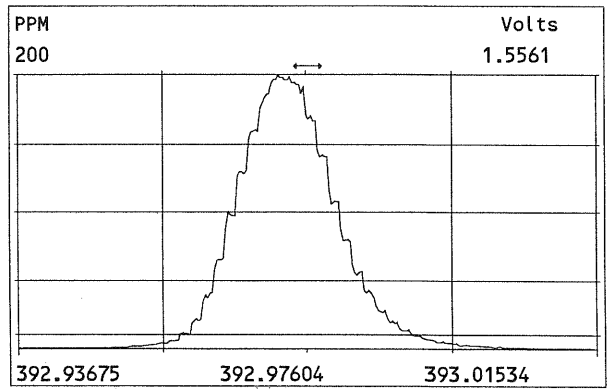


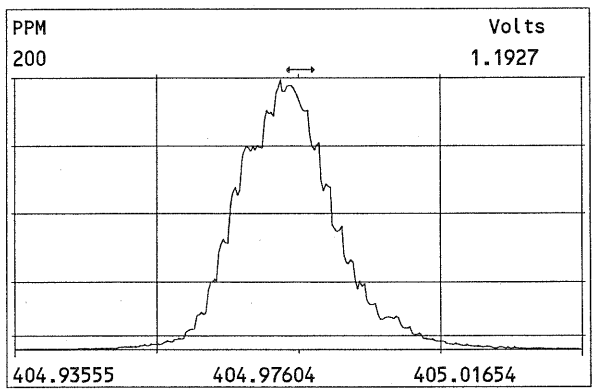


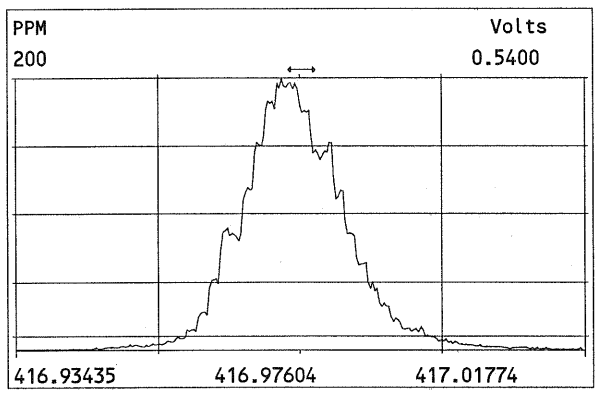
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:3 Reference:PFK

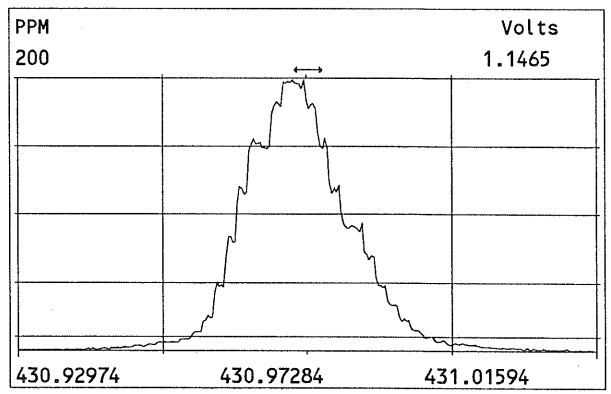


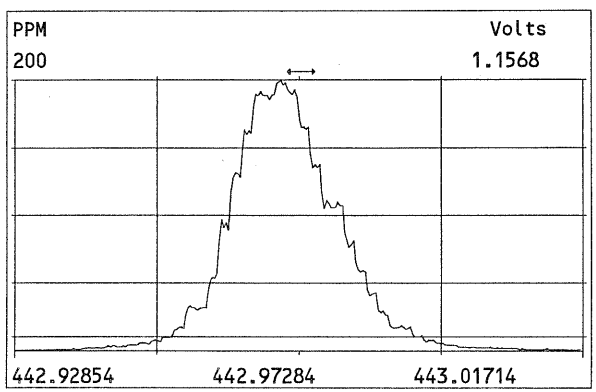


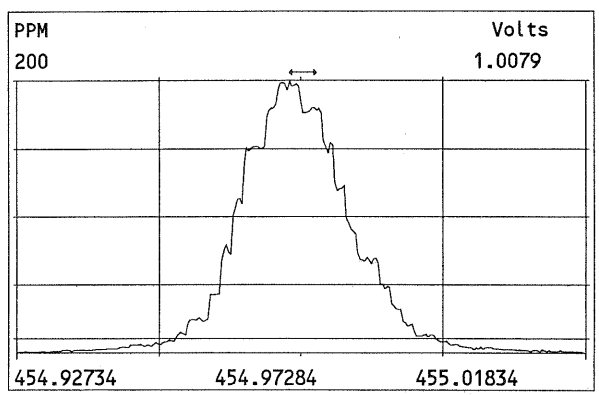




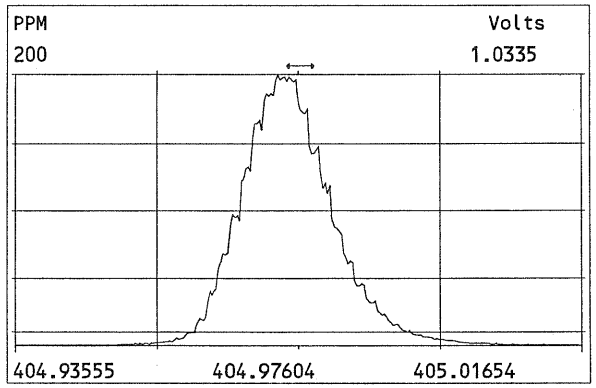


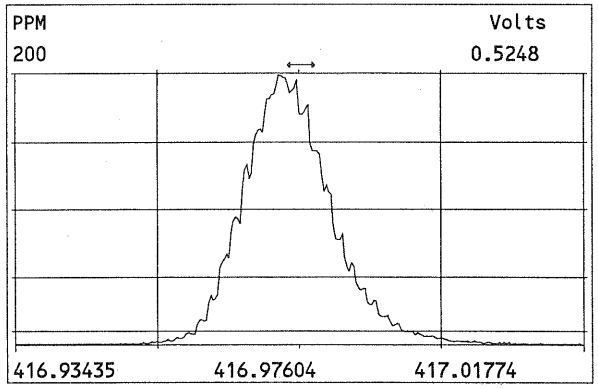


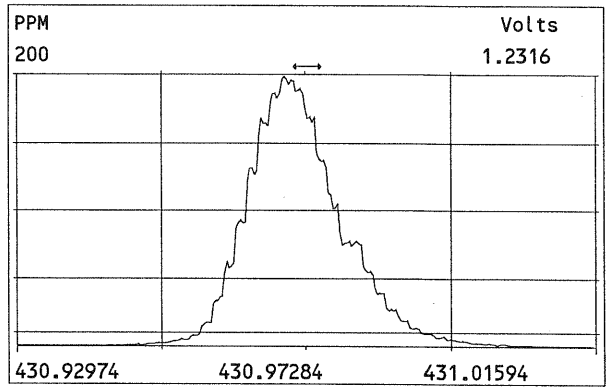


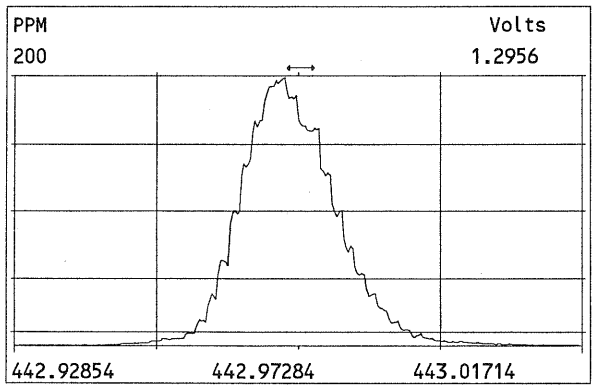


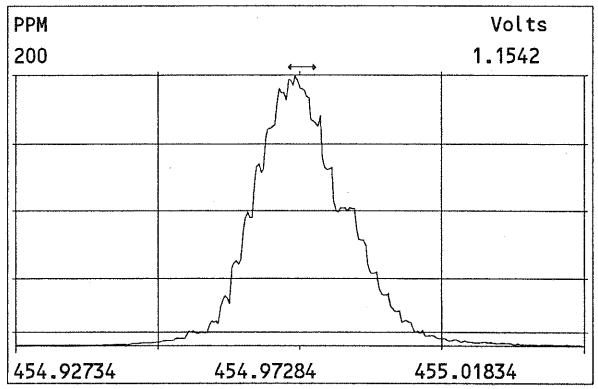
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:4 Reference:PFK

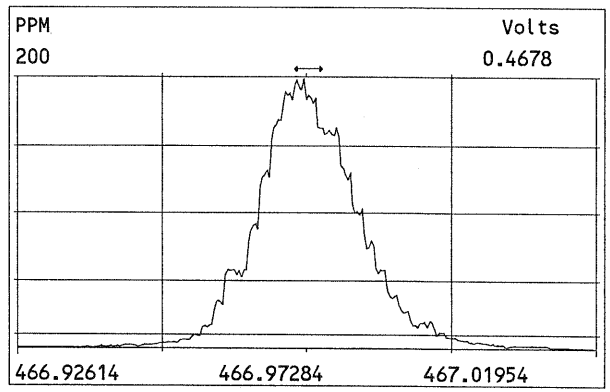


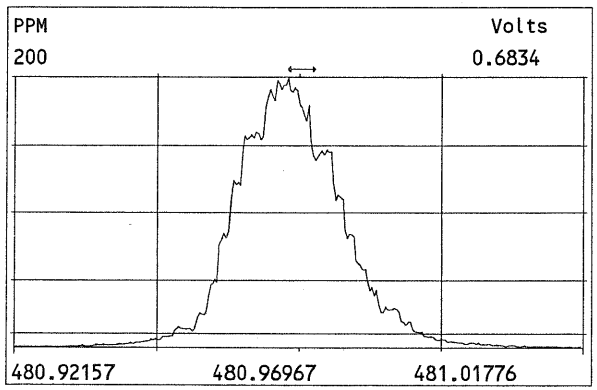




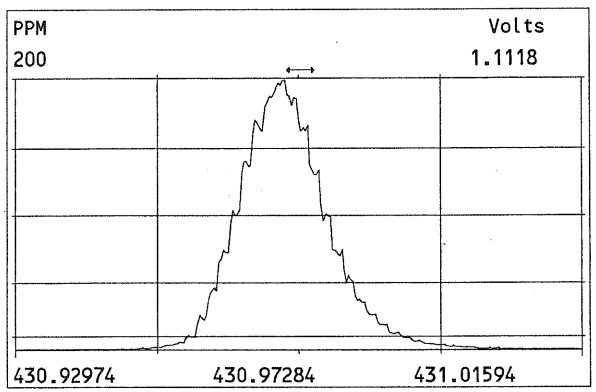


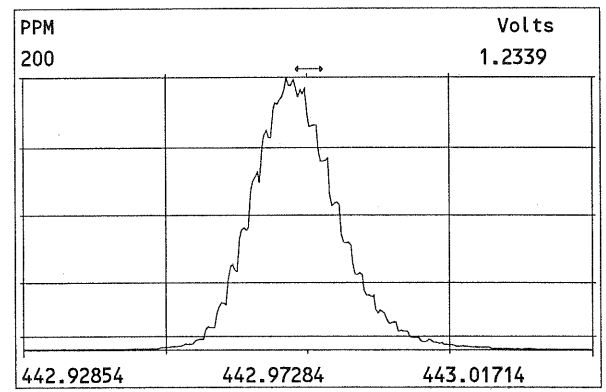


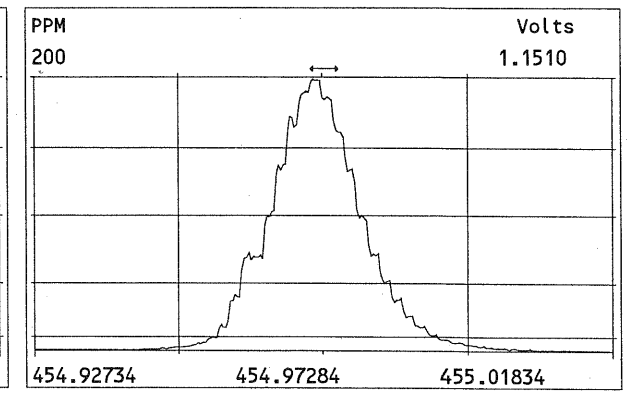


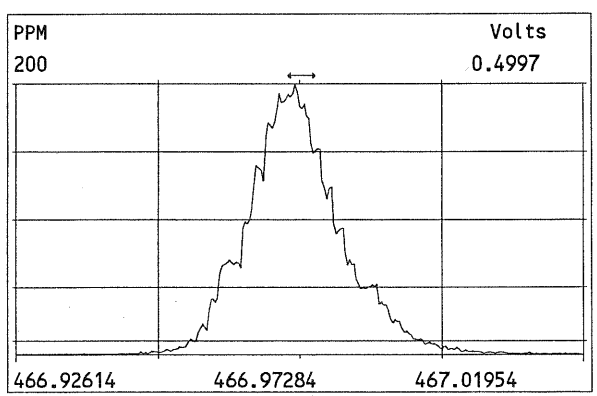


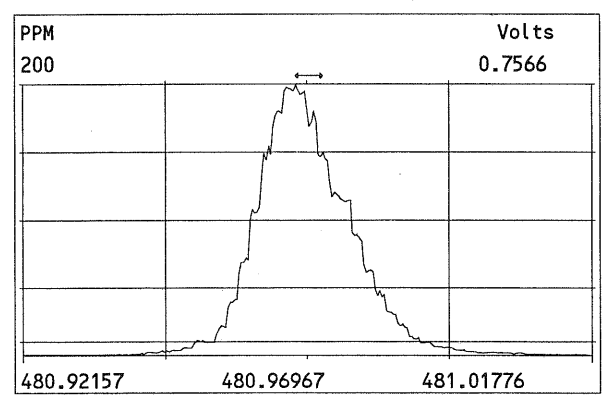
Peak Locate Examination:27-JUL-2006:10:33 File:27JUL06M
Experiment:PCDD Function:5 Reference:PFK

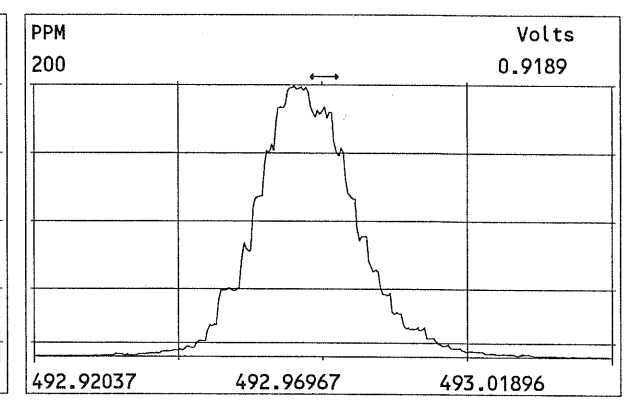


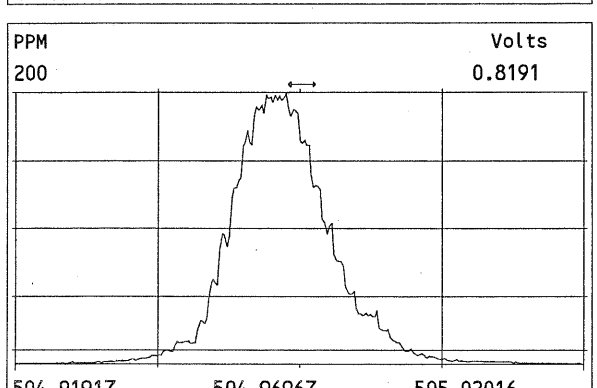


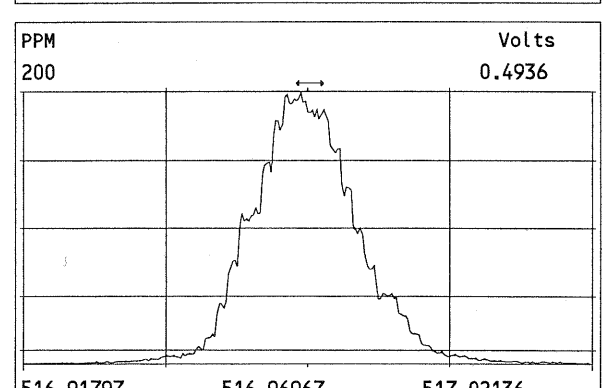




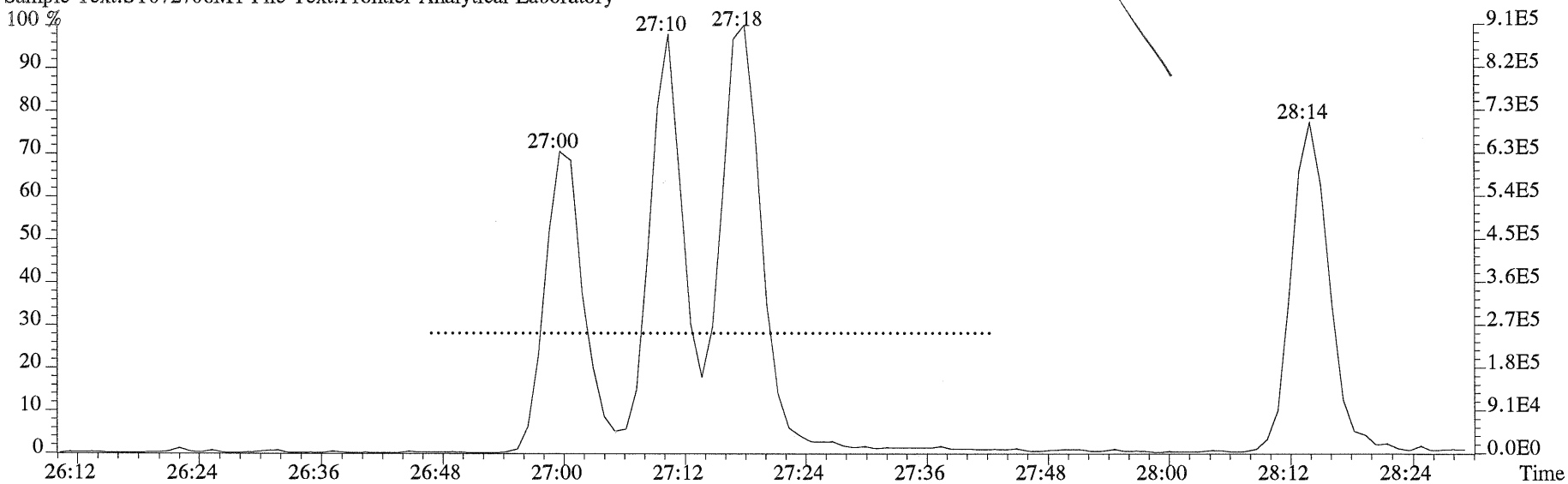




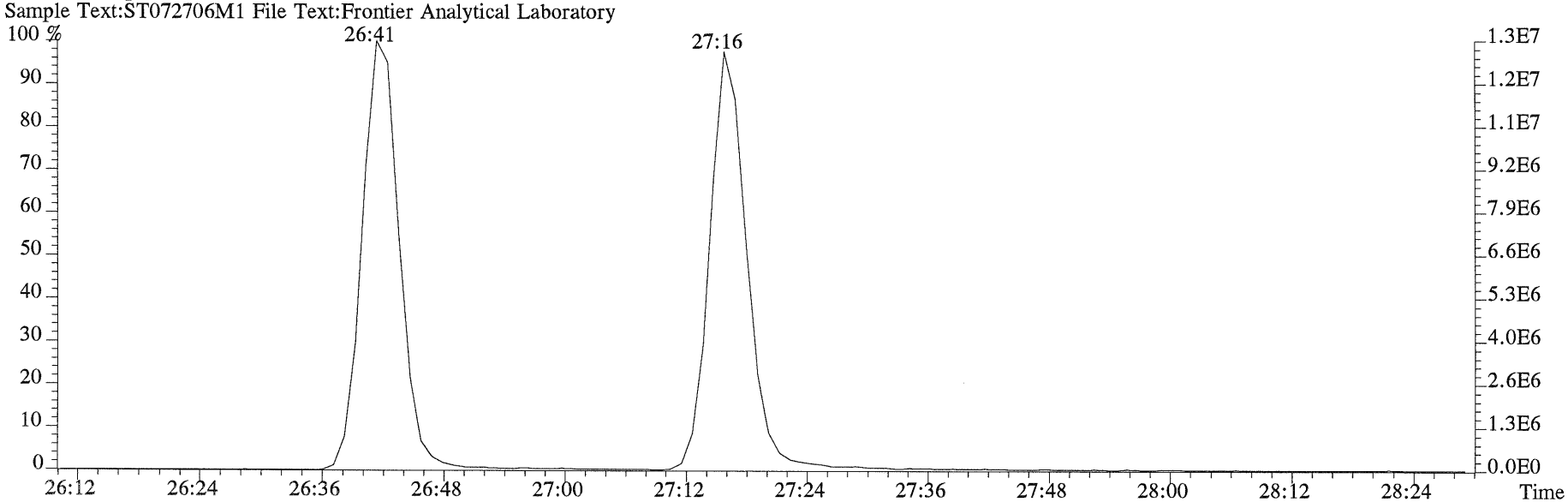




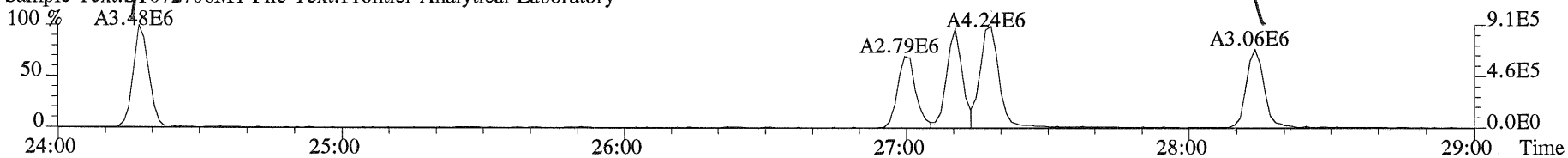
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



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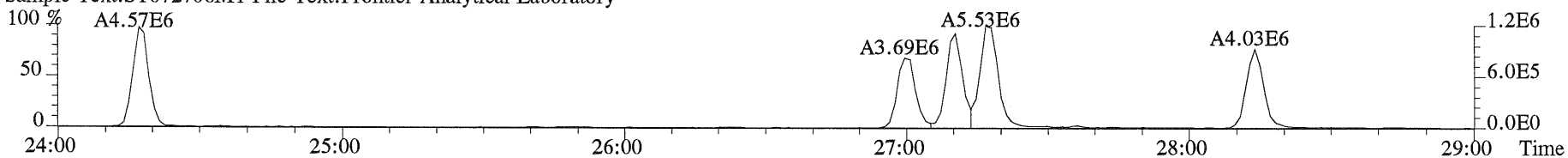
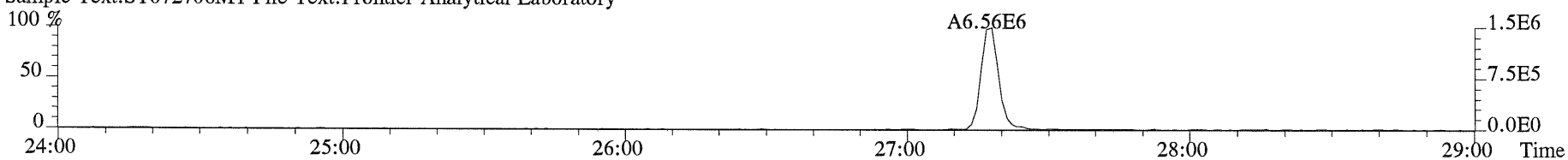
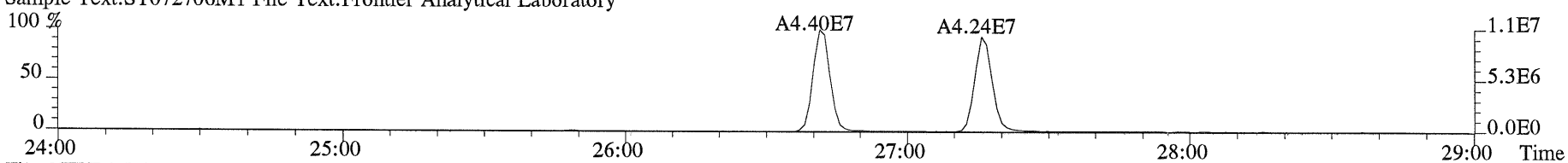
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



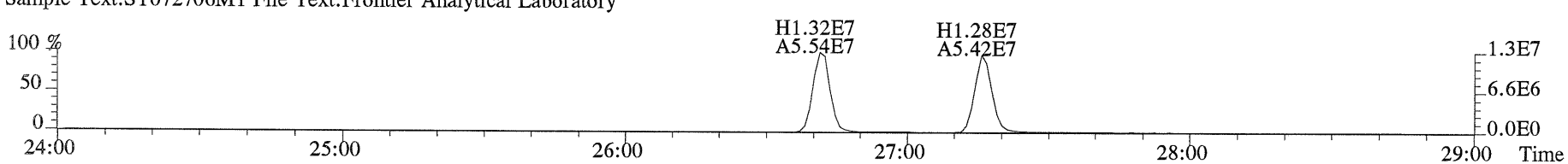
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



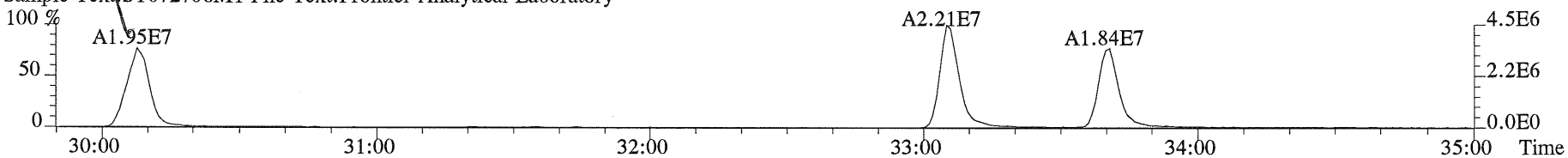
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



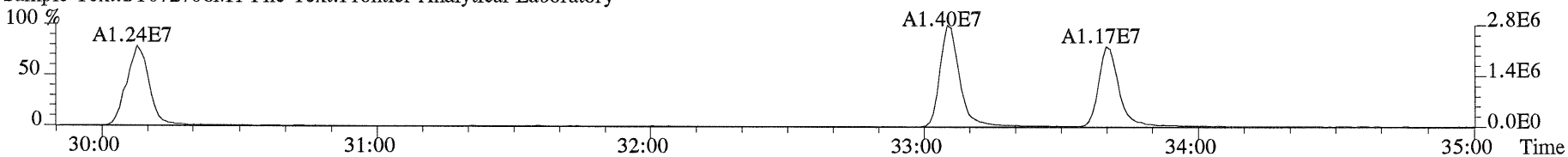
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



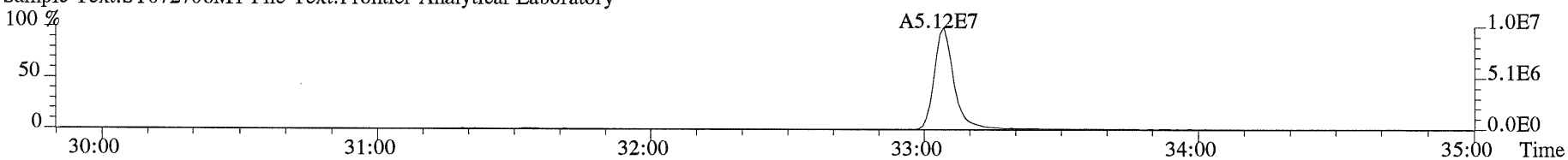
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



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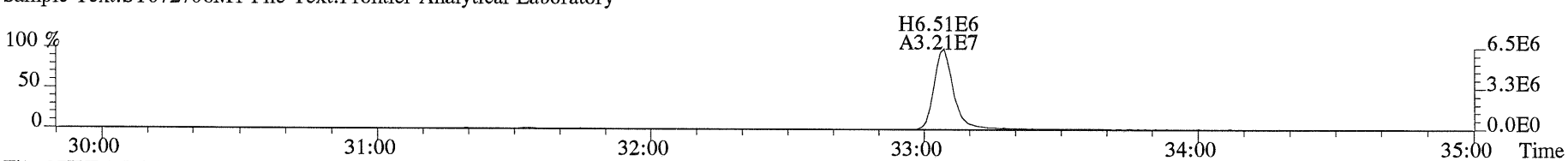
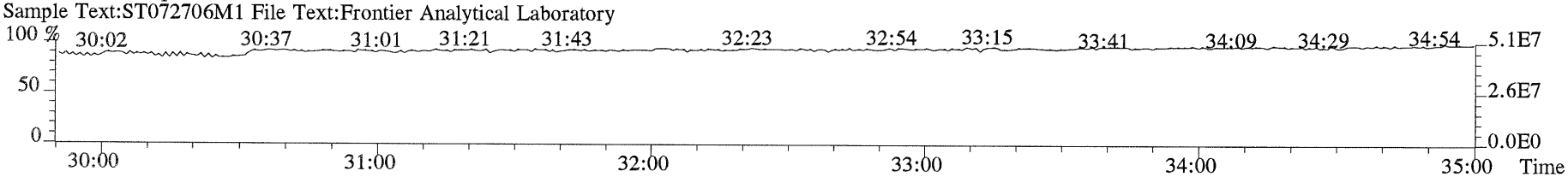
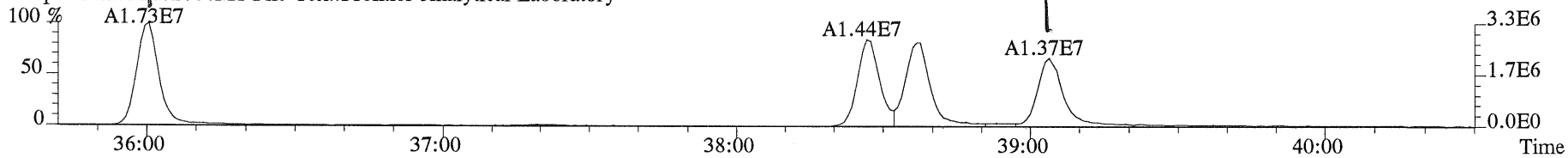
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



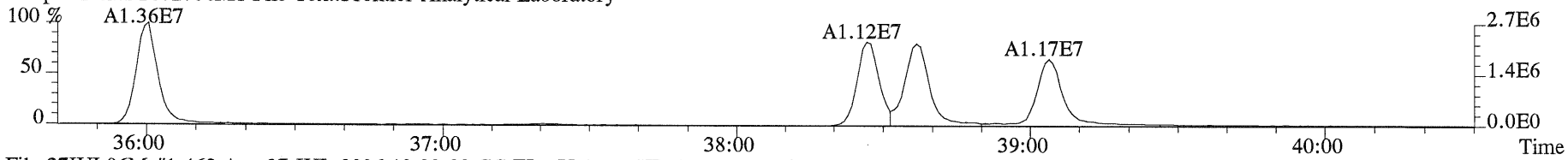
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



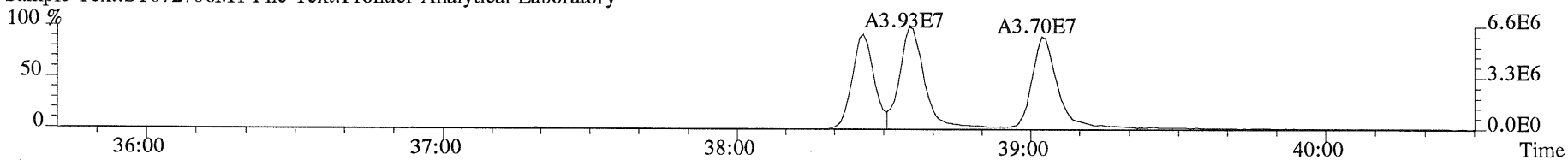
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



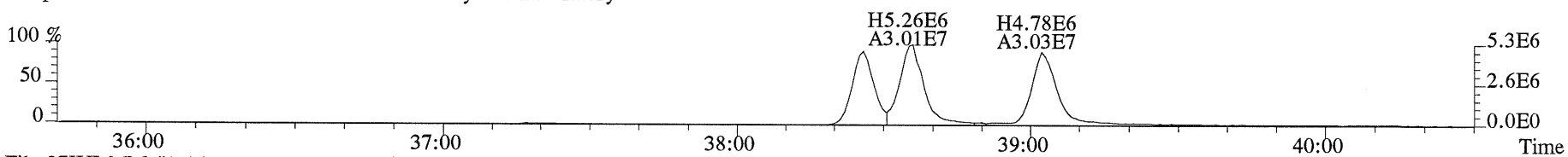
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



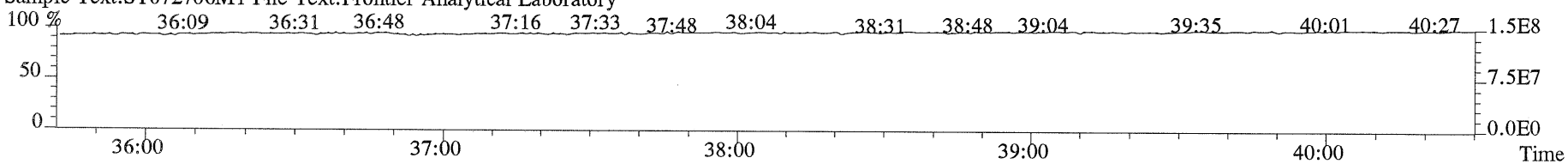
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



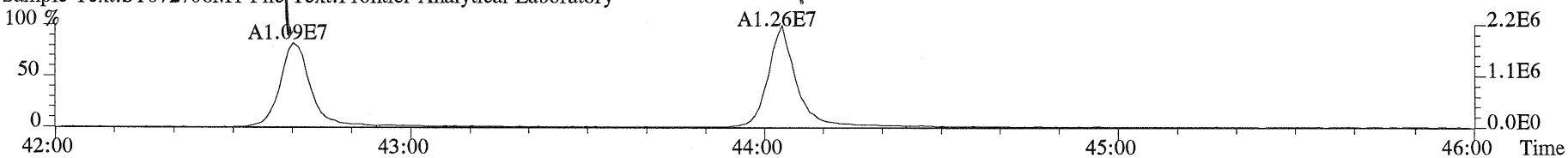
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



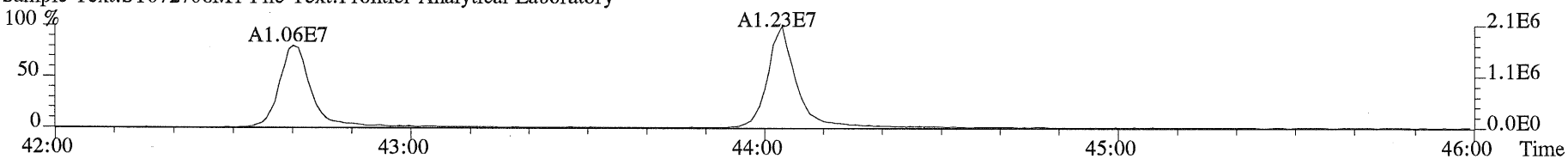
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



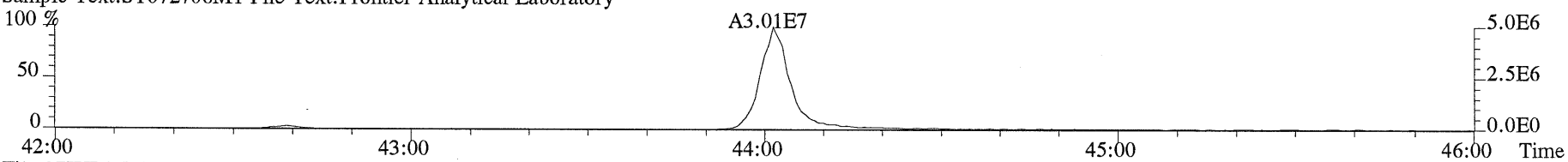
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



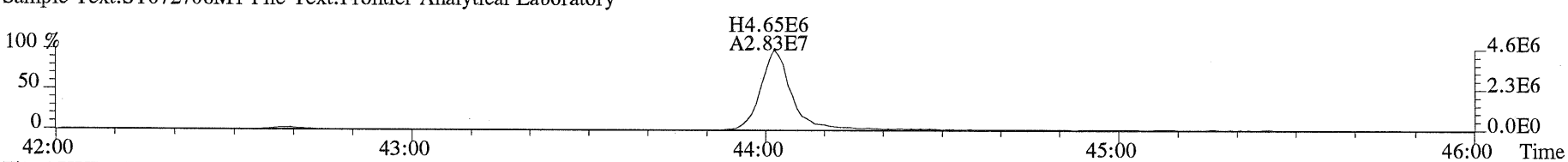
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



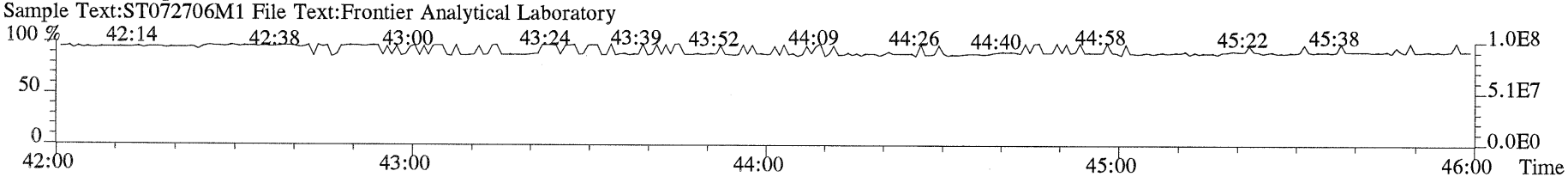
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



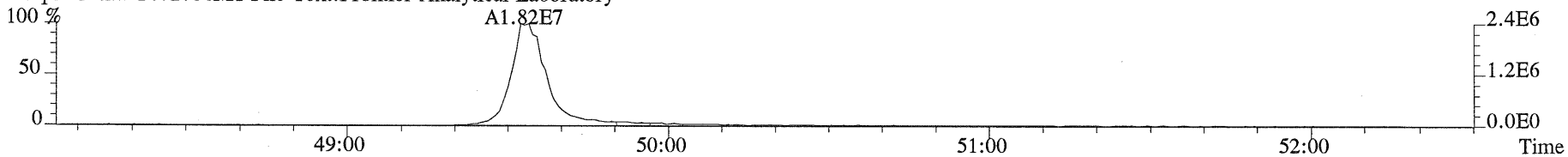
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



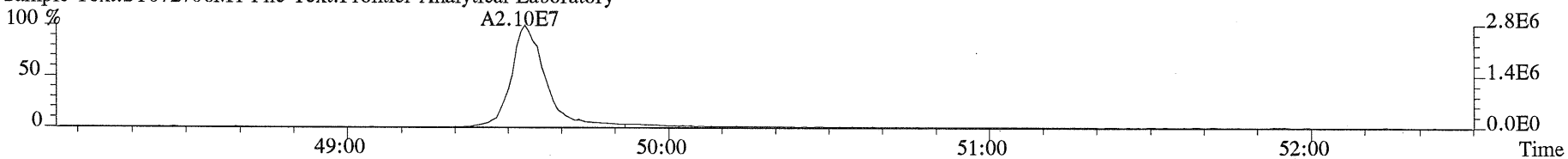
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



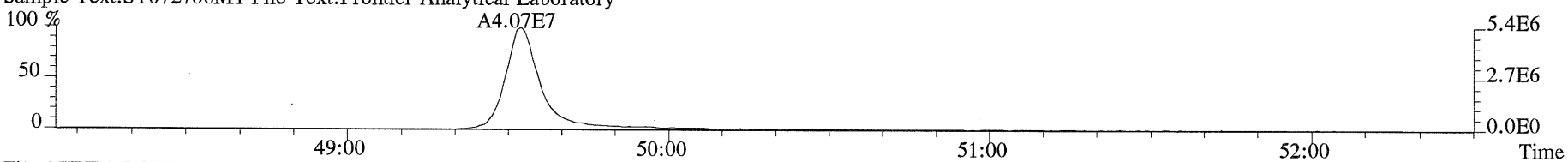
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



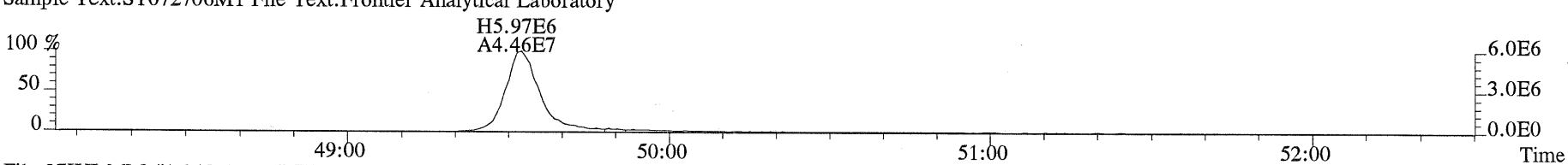
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



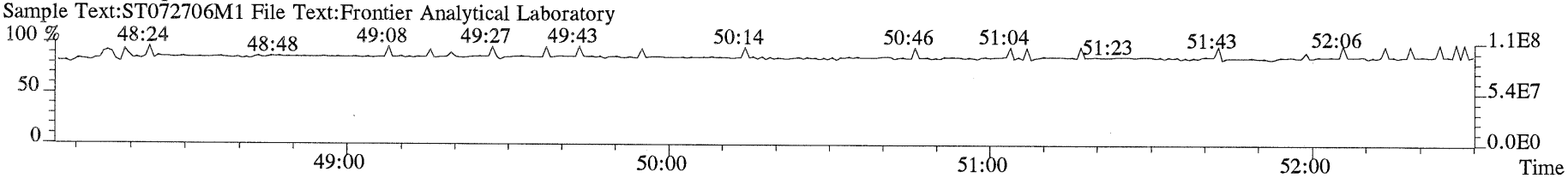
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



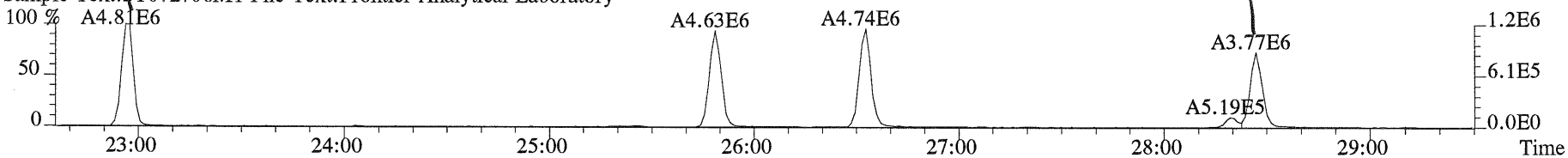
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



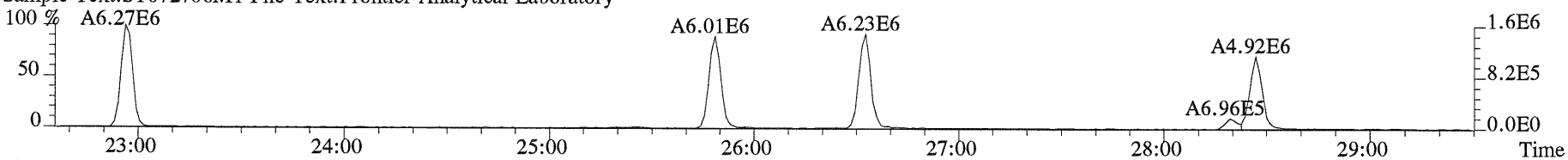
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



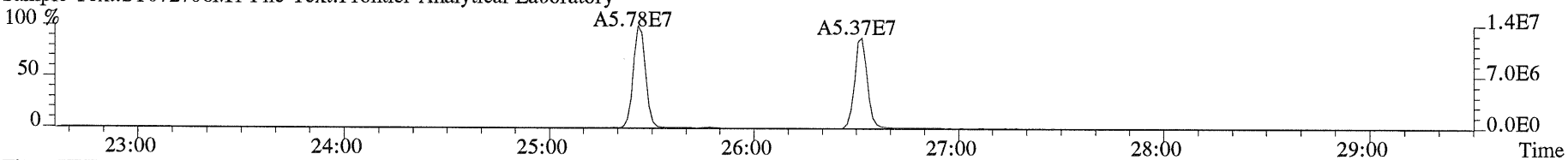
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



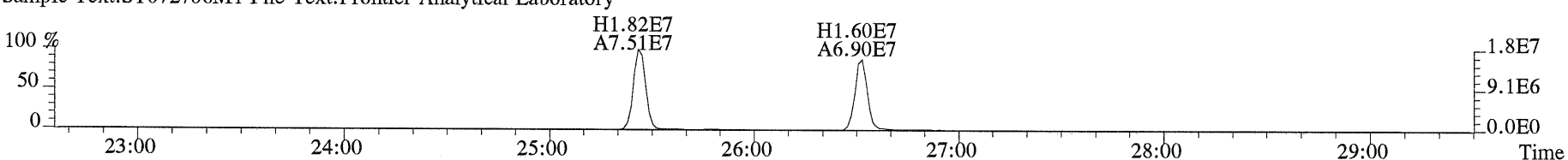
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



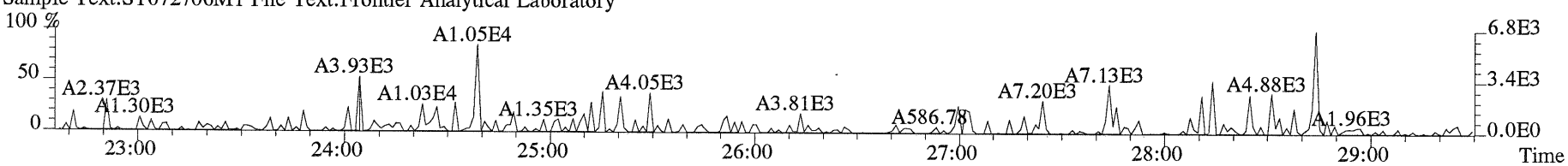
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



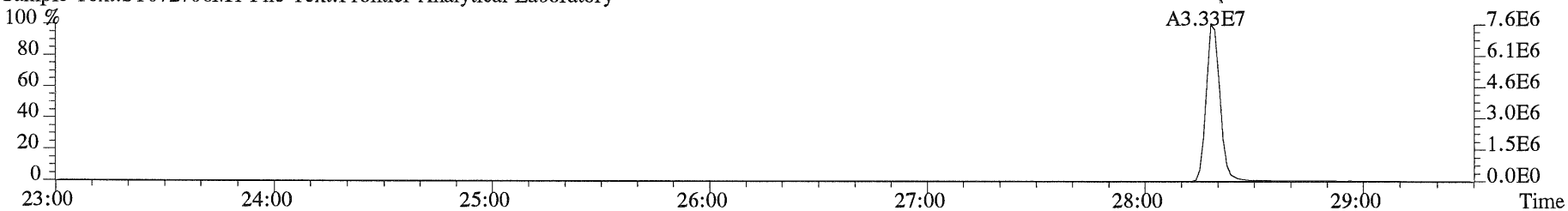
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



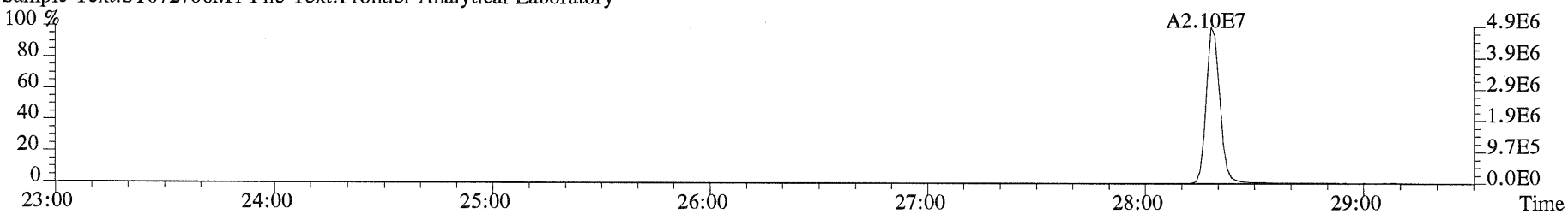
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



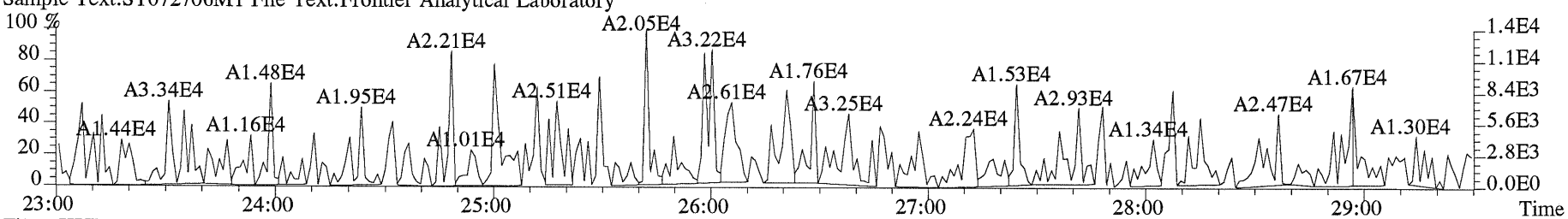
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



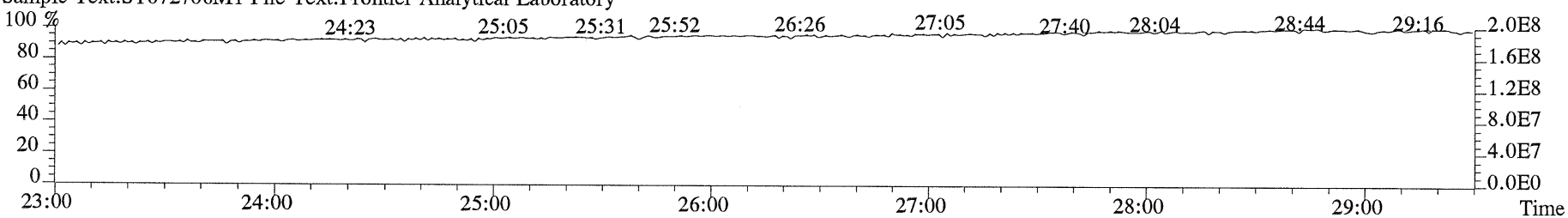
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



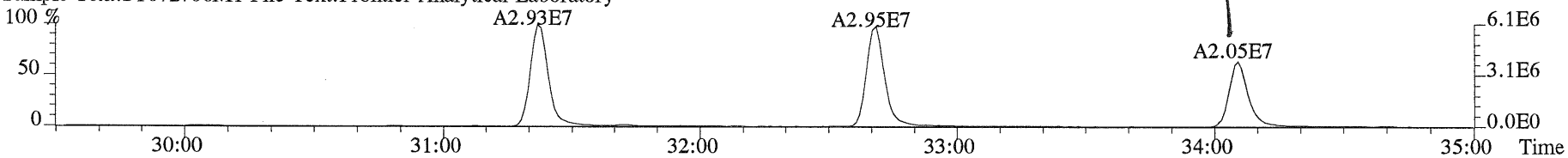
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



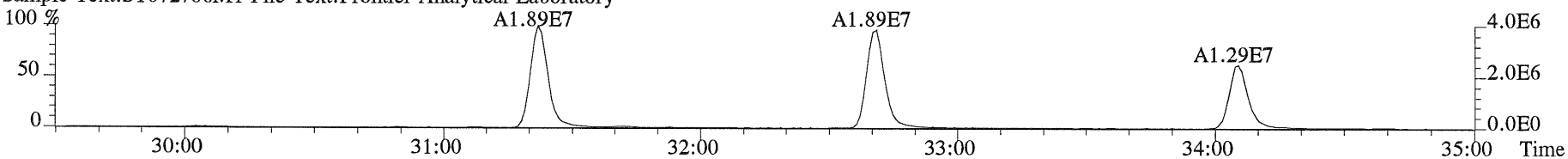
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



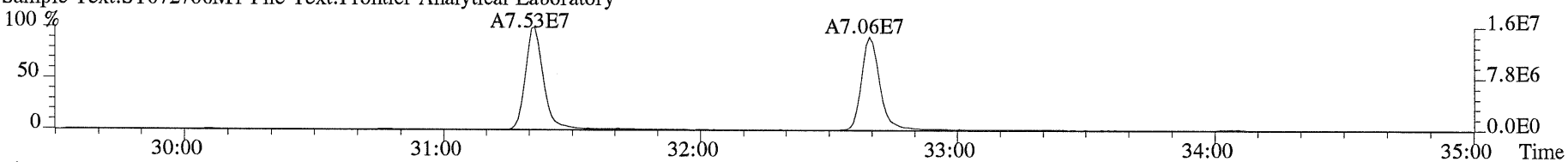
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



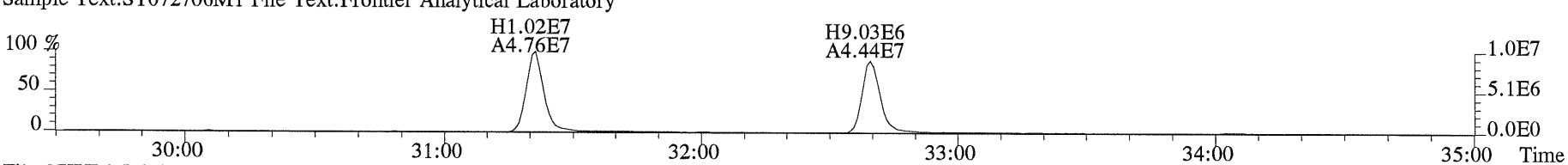
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



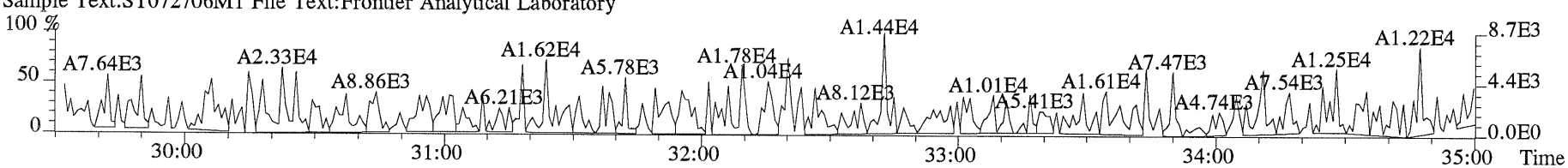
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



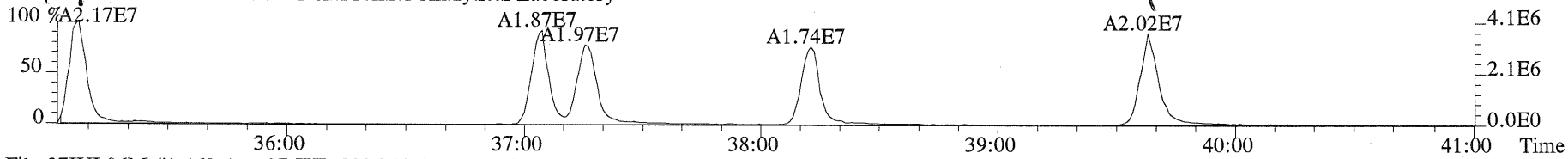
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



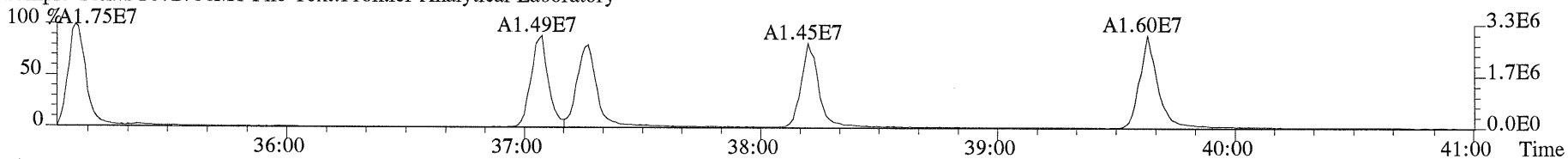
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



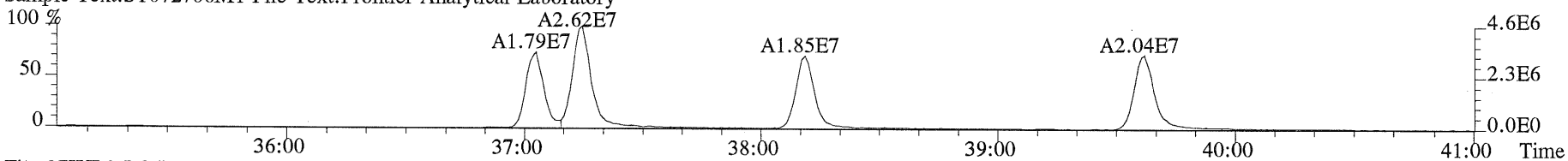
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



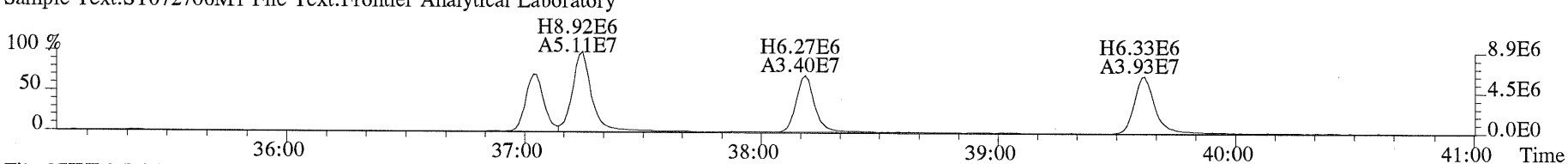
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



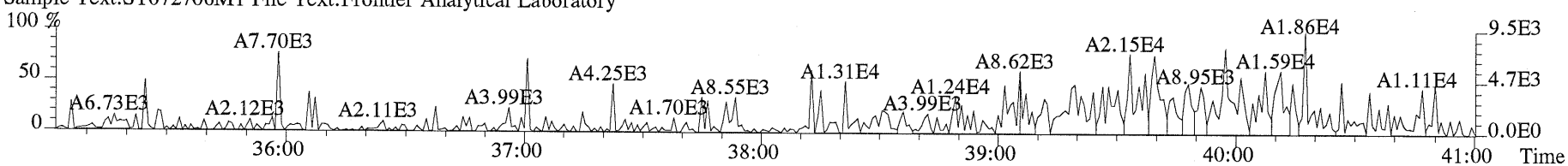
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



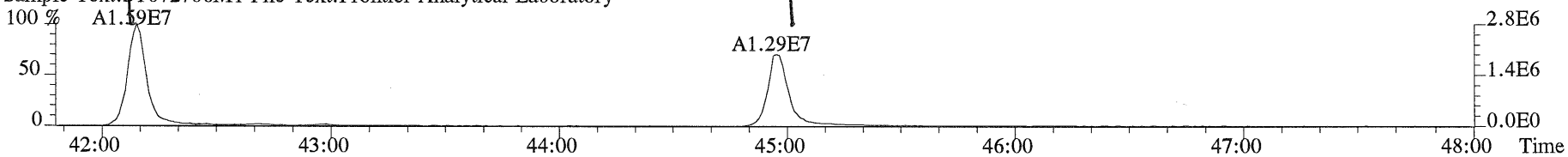
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



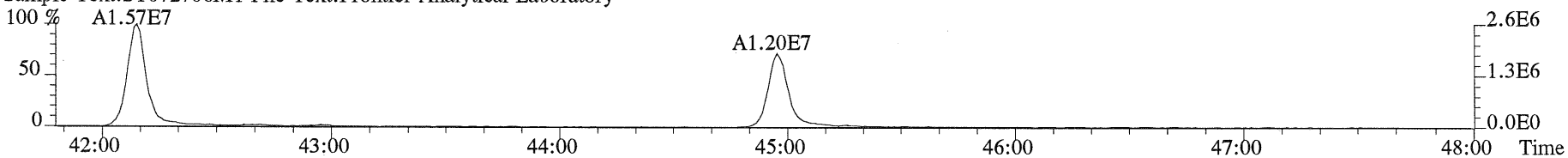
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



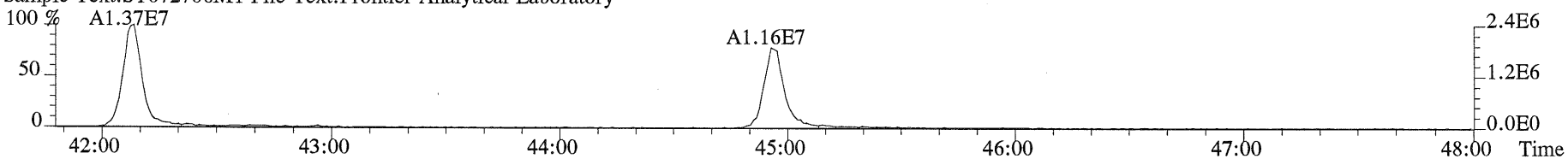
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



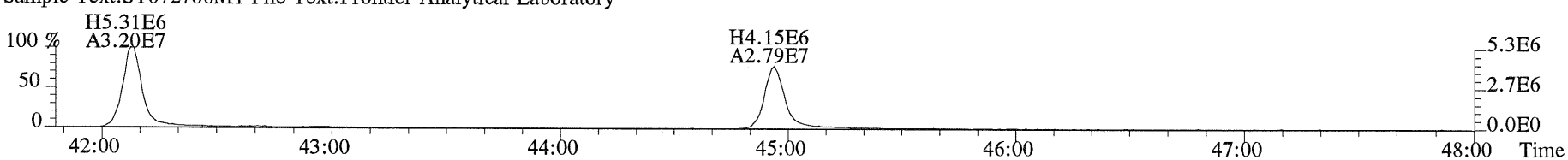
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



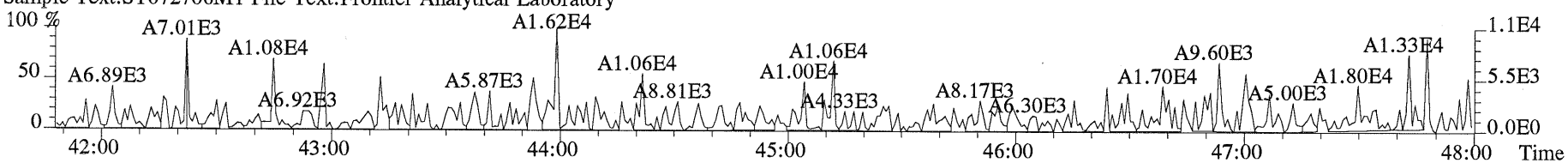
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



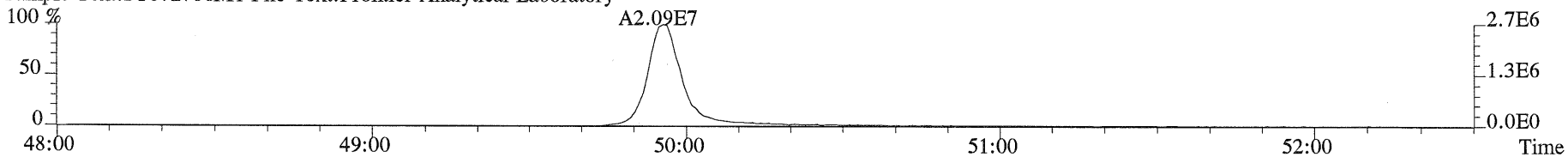
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



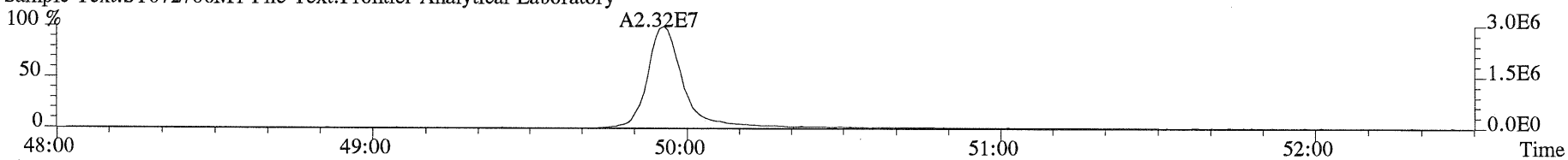
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



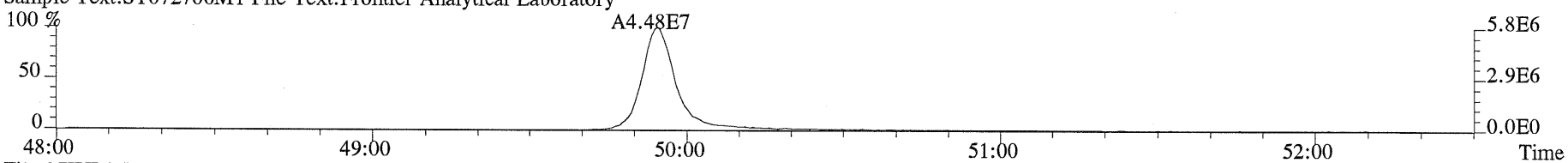
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



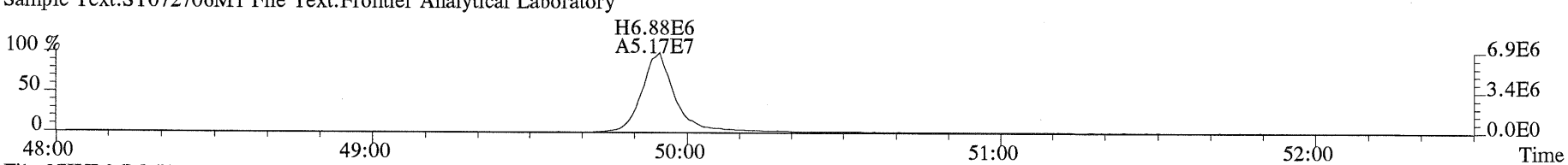
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



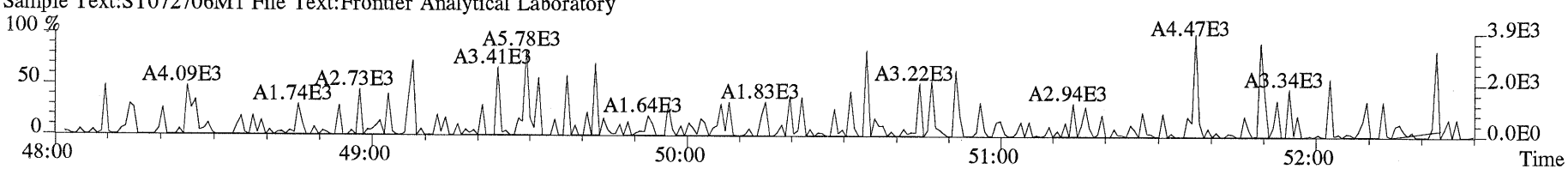
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



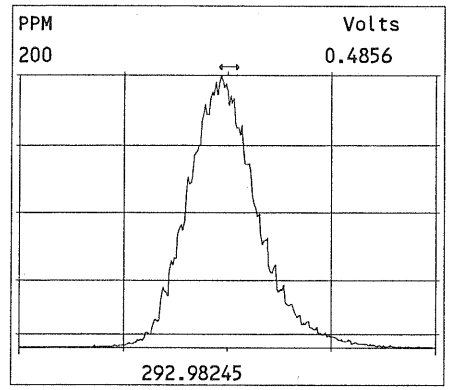
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory

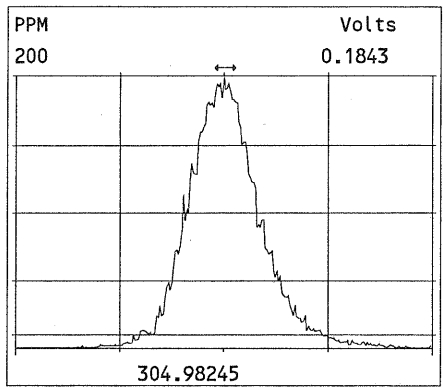


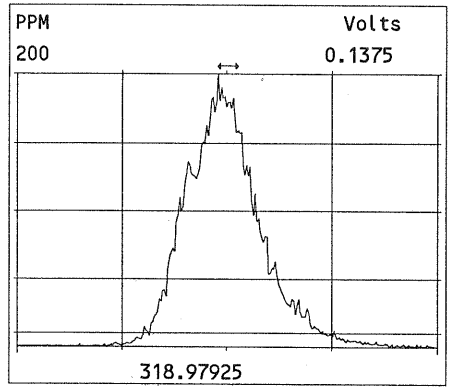
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory

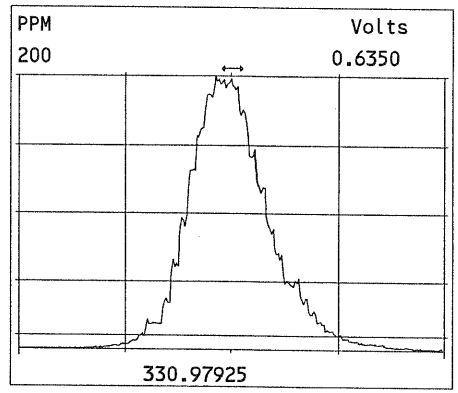


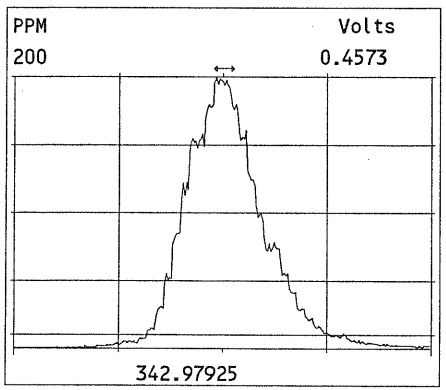
Peak Locate Examination:28-JUL-2006:03:12 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

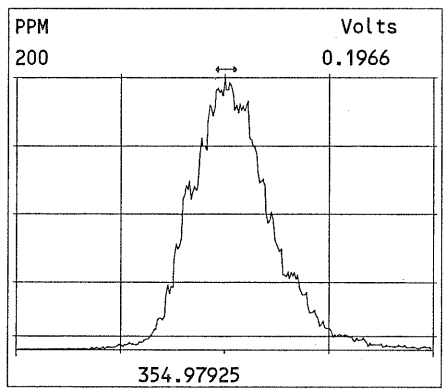


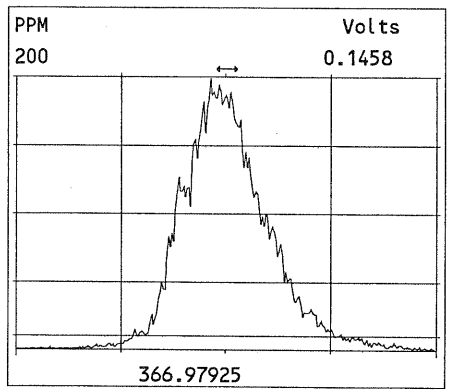


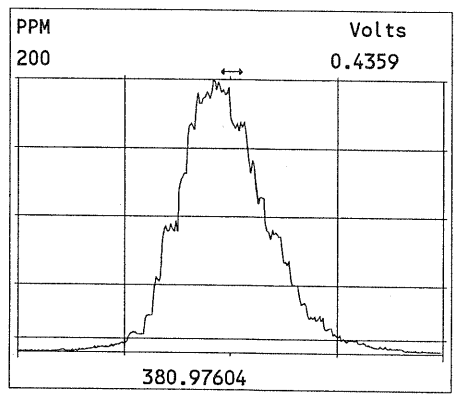


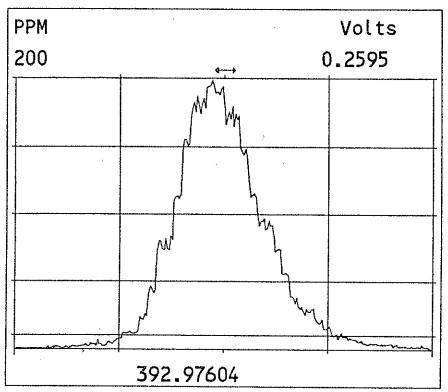


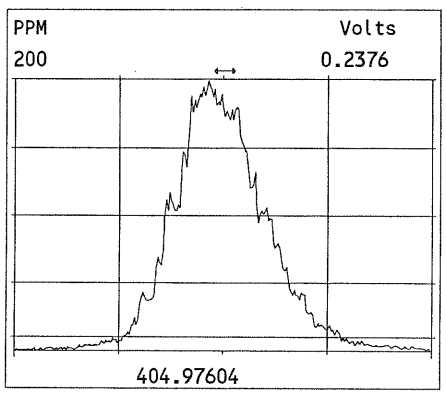


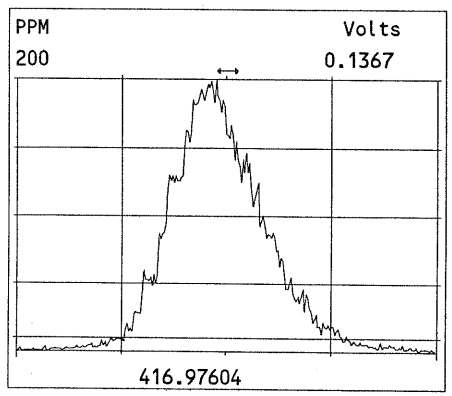




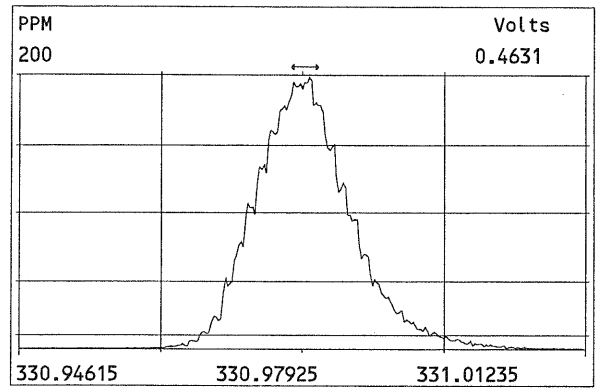


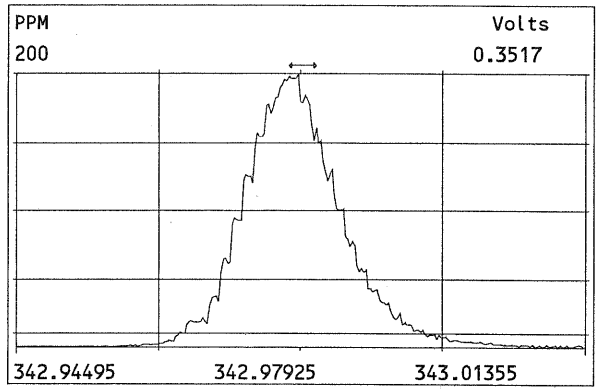


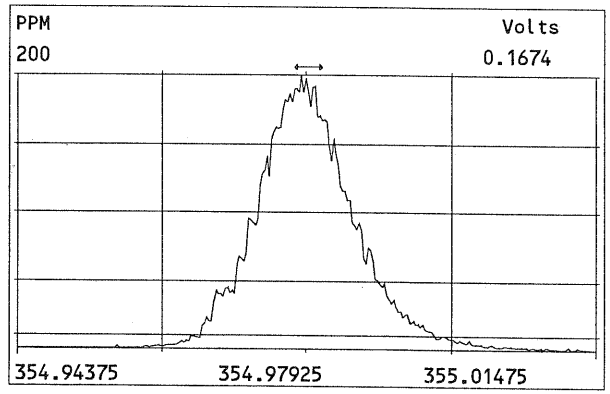


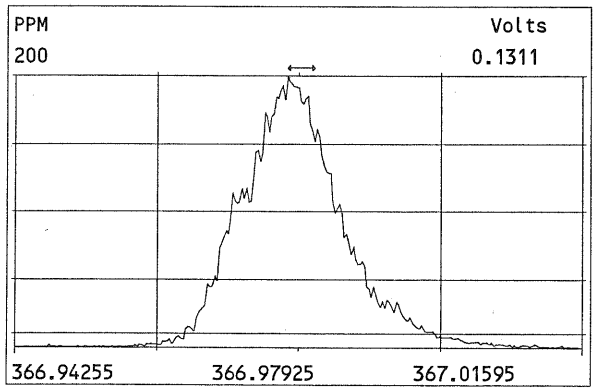


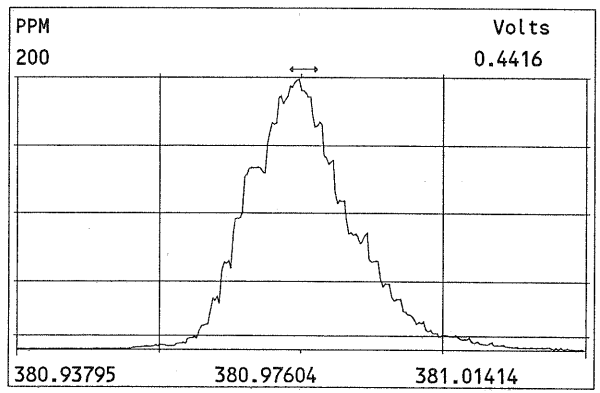
Peak Locate Examination:28-JUL-2006:03:14 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

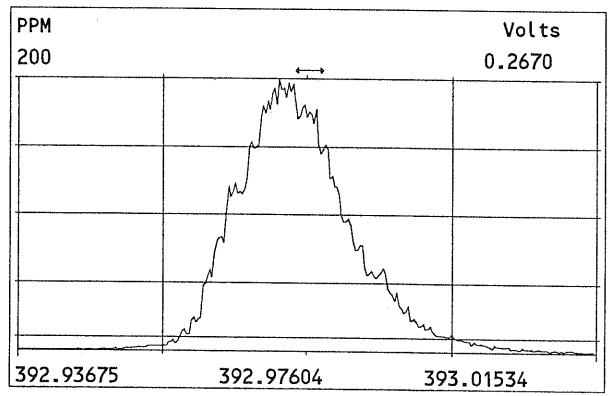


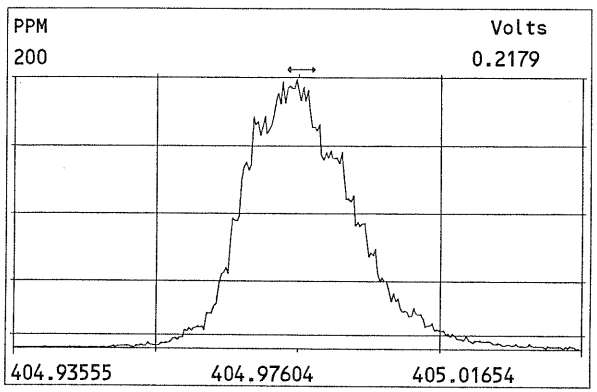


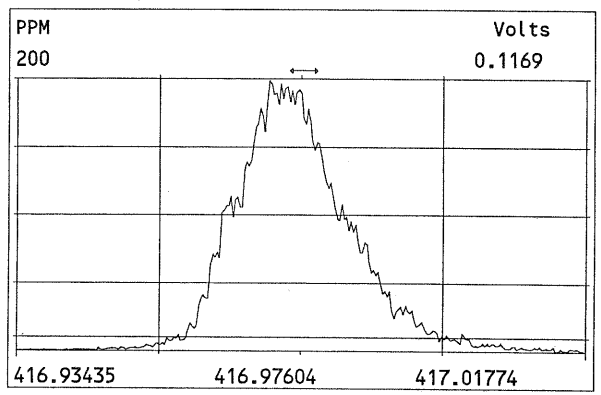




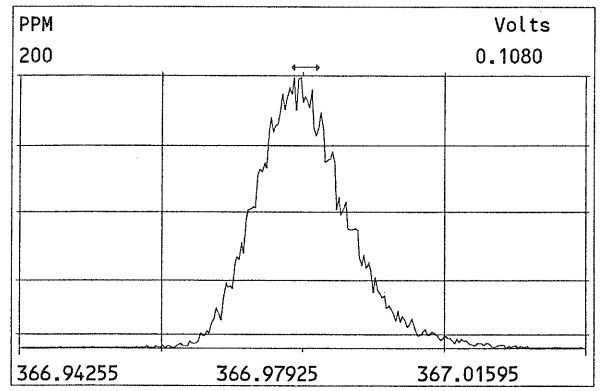


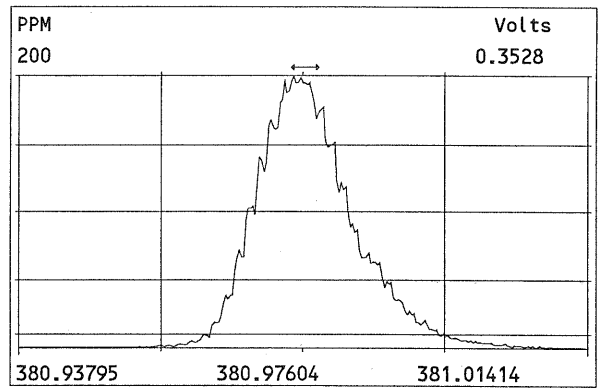


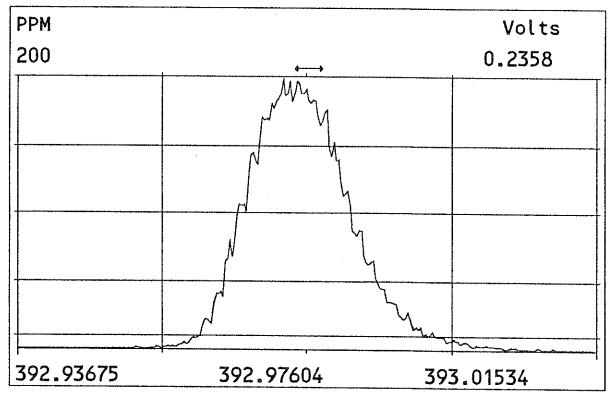


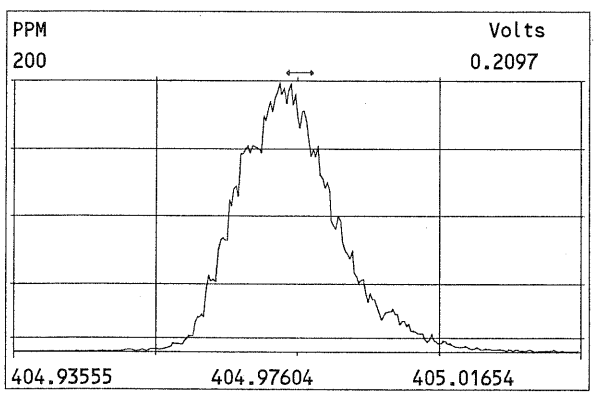


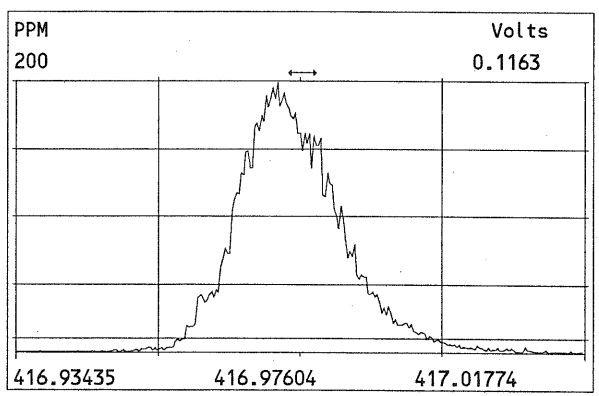
Peak Locate Examination:28-JUL-2006:03:16 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

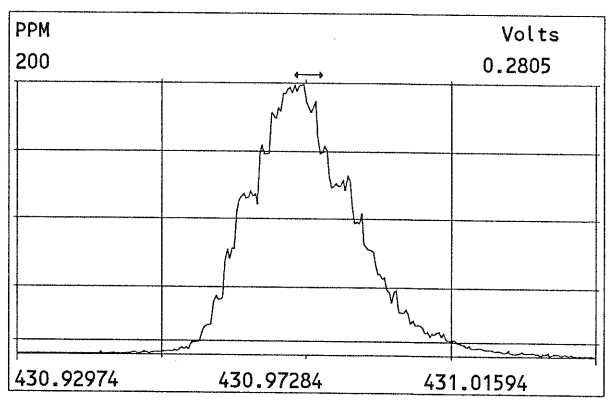


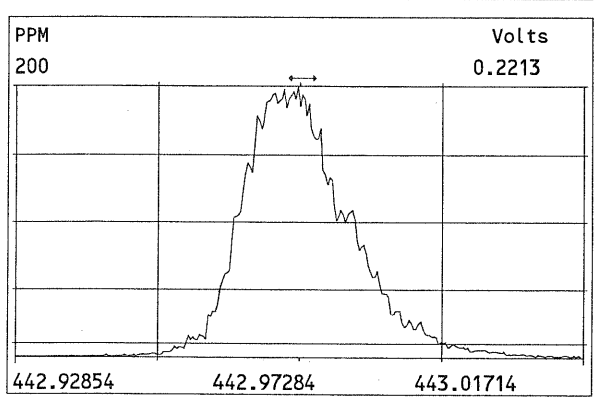


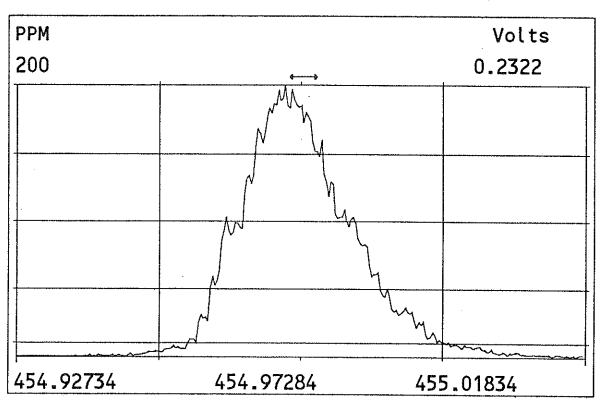




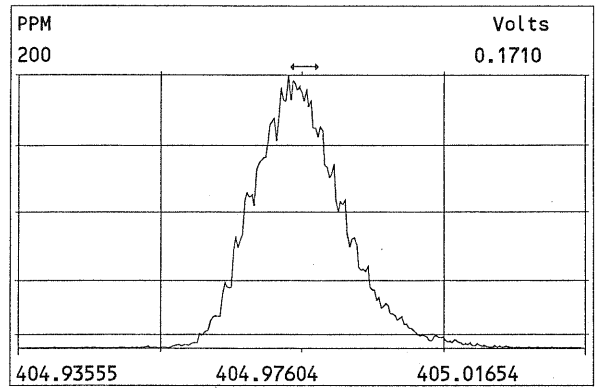


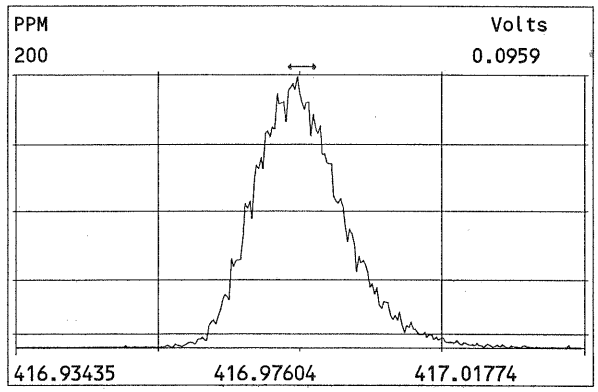


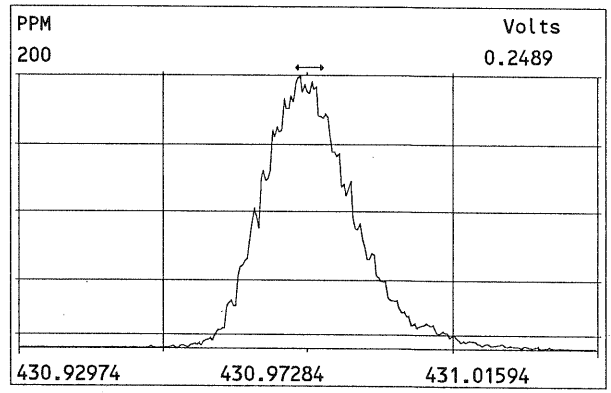


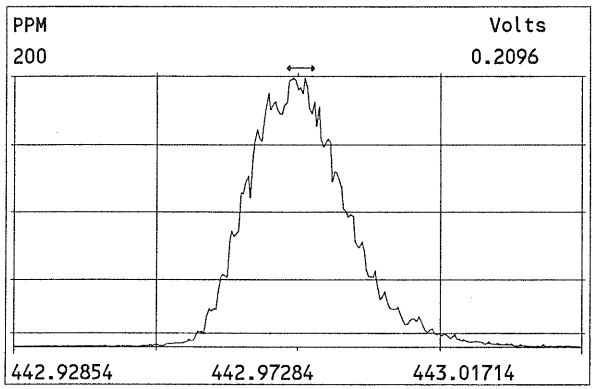


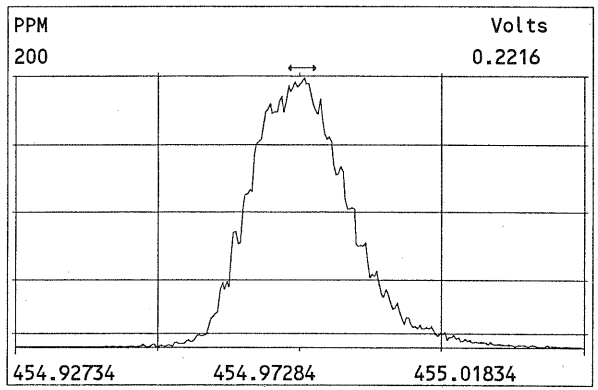
Peak Locate Examination:28-JUL-2006:03:17 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

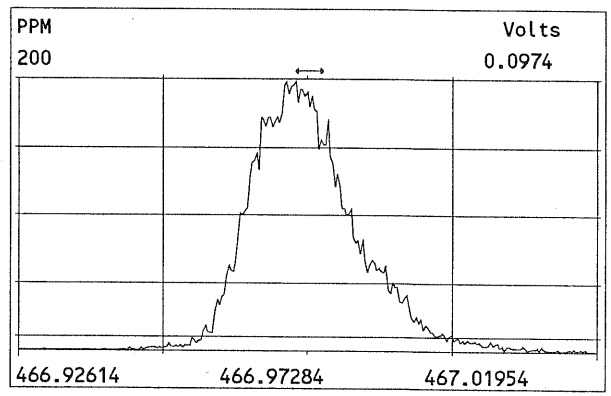


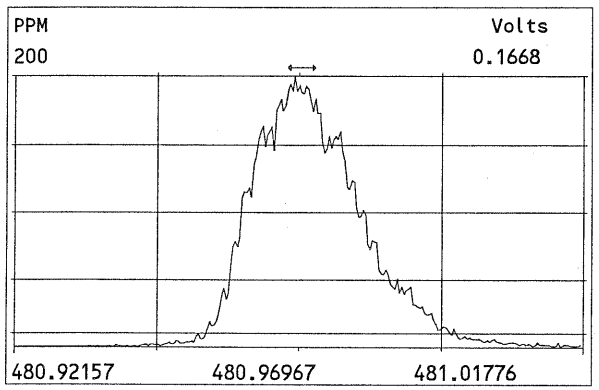




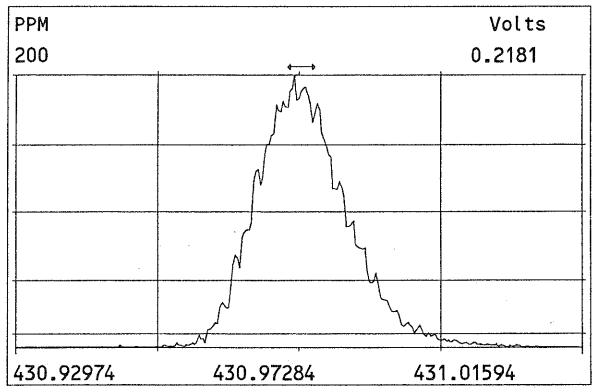


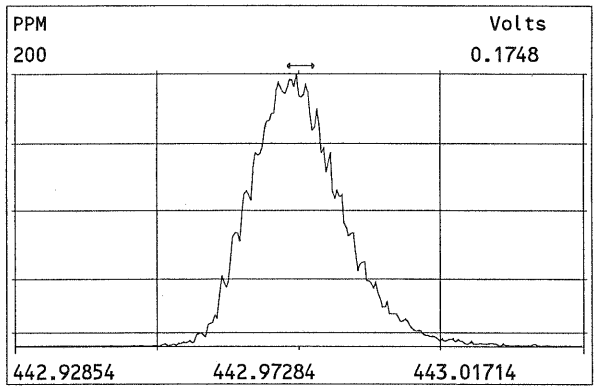


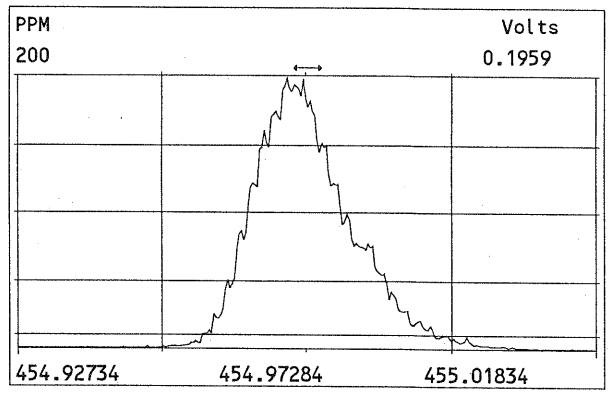


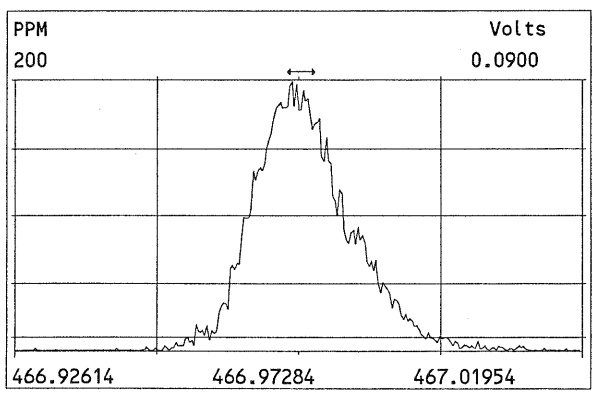


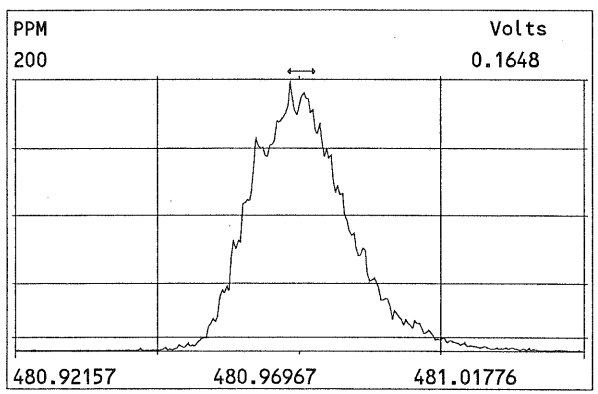
Peak Locate Examination:28-JUL-2006:03:19 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

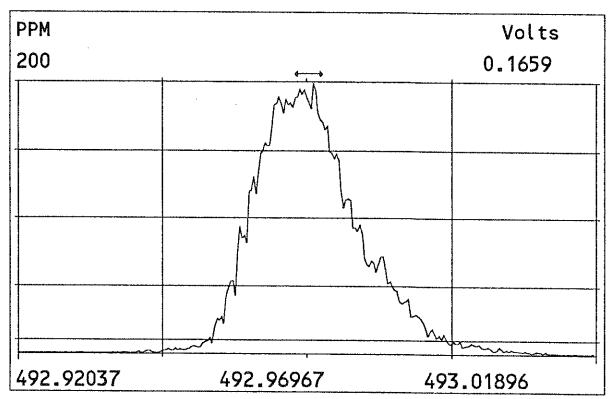


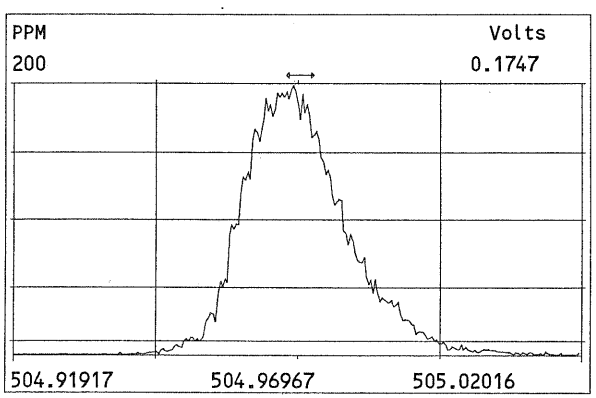


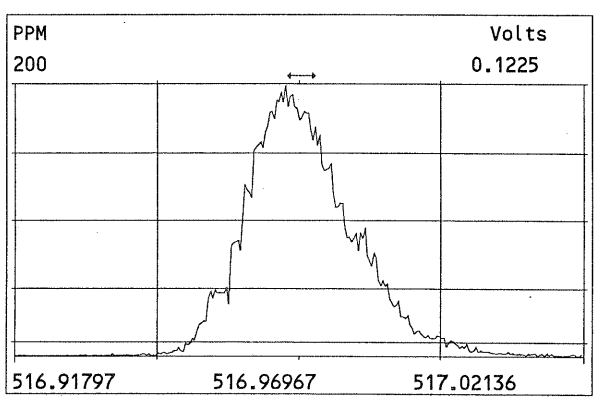












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 17:01:01

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	8.71	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	46.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	47.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	47.7	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.0	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	48.6	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	8.56	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	46.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	46.0	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	48.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	48.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	50.6	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.4	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	101	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 17:01:01

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	94.2	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	90.9	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	94.4	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	100	72.0 - 138
13C-OCDD	M+2/M+4	0.87	0.76-1.02	y	201	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	102	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	98.7	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	98.5	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	81.0	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	84.1	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	86.2	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	84.8	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	89.0	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	96.2	77.0 - 129
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	193	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.44	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/28/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 Time: 17:01:01

DB-5 IS Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 Time: 17:01:01

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:18	1,3,6,8-TCDF (F)	22:57
1,2,8,9-TCDD (L)	28:15	1,2,8,9-TCDF (L)	28:28
1,2,4,7,9-PeCDD (F)	30:09	1,3,4,6,8-PeCDF (F)	28:19
1,2,3,8,9-PeCDD (L)	33:41	1,2,3,8,9-PeCDF (L)	34:06
1,2,4,6,7,9-HxCDD (F)	36:01	1,2,3,4,6,8-HxCDF (F)	35:08
1,2,3,7,8,9-HxCDD (L)	39:05	1,2,3,7,8,9-HxCDF (L)	39:39
1,2,3,4,6,7,9-HpCDD (F)	42:42	1,2,3,4,6,7,8-HpCDF (F)	42:11
1,2,3,4,6,7,8-HpCDD (L)	44:04	1,2,3,4,7,8,9-HpCDF (L)	44:59

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/28/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 17:01:01 CS3 or VER Data Filename: 27JUL06M Sam:8

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.175	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.224	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 17:01:01 CS3 or VER Data Filename: 27JUL06M Sam:8

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.278	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/28/06

FAL ID: ST072706M2 Filename: 27JUL06M Sam:8 Acquired: 27-JUL-06 17:01:01 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072706M2 EndCal: ST072706M3
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 94.1
WHO 1998 Tox: 117

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.36e+07	0.76 y	27:18	1.10	8.71		2.50	-	*	
1,2,3,7,8-PeCDD	5.32e+07	1.56 y	33:07	0.90	46.3		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.15e+07	1.27 y	38:28	0.96	47.3		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.52e+07	1.22 y	38:38	0.83	47.7		2.50	-	*	
1,2,3,7,8,9-HxCDD	4.06e+07	1.21 y	39:05	0.77	51.0		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	4.48e+07	1.06 y	44:04	0.86	48.6		2.50	-	*	
OCDD	7.05e+07	0.87 y	49:35	0.87	101		2.50	-	*	
2,3,7,8-TCDF	1.45e+07	0.78 y	26:33	0.99	8.56		2.50	-	*	
1,2,3,7,8-PeCDF	6.56e+07	1.56 y	31:23	0.80	46.4		2.50	-	*	
2,3,4,7,8-PeCDF	6.71e+07	1.56 y	32:42	0.88	46.0		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.47e+07	1.25 y	37:05	1.42	49.5		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.43e+07	1.22 y	37:17	0.97	48.7		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.18e+07	1.24 y	38:13	1.26	48.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	6.28e+07	1.27 y	39:39	1.34	50.6		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.55e+07	1.05 y	42:11	1.28	50.6		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.60e+07	1.03 y	44:59	1.22	50.4		2.50	-	*	
OCDF	7.99e+07	0.90 y	49:57	0.90	101		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.42e+08	0.78 y	27:17	1.00	101					101
13C-1,2,3,7,8-PeCDD	1.27e+08	1.56 y	33:05	0.96	94.2					94.2
13C-1,2,3,4,7,8-HxCDD	9.16e+07	1.27 y	38:27	0.90	90.9					90.9
13C-1,2,3,6,7,8-HxCDD	1.14e+08	1.27 y	38:37	1.09	94.4					94.4
13C-1,2,3,4,6,7,8-HpCDD	1.07e+08	1.04 y	44:03	0.96	100					100
13C-OCDD	1.60e+08	0.87 y	49:34	0.71	201					101
13C-2,3,7,8-TCDF	1.71e+08	0.78 y	26:32	0.94	102					102
13C-1,2,3,7,8-PeCDF	1.77e+08	1.55 y	31:22	1.00	98.7					98.7
13C-2,3,4,7,8-PeCDF	1.67e+08	1.58 y	32:41	0.94	98.5					98.5
13C-1,2,3,4,7,8-HxCDF	7.76e+07	0.52 y	37:04	0.86	81.0					81.0
13C-1,2,3,6,7,8-HxCDF	1.15e+08	0.52 y	37:15	1.23	84.1					84.1
13C-2,3,4,6,7,8-HxCDF	8.48e+07	0.51 y	38:13	0.88	86.2					86.2
13C-1,2,3,7,8,9-HxCDF	9.27e+07	0.52 y	39:38	0.98	84.8					84.8
13C-1,2,3,4,6,7,8-HpCDF	8.55e+07	0.44 y	42:09	0.86	89.0					89.0
13C-1,2,3,4,7,8,9-HpCDF	7.49e+07	0.44 y	44:57	0.70	96.2					96.2
13C-OCDF	1.76e+08	0.88 y	49:56	0.82	193					96.3
37Cl-2,3,7,8-TCDD	9.64e+06		27:18	0.81	8.44					84.4
13C-1,2,3,4-TCDD	1.41e+08	0.79 y	26:42	-	73.8					
13C-1,2,3,4-TCDF	1.79e+08	0.77 y	25:27	-	62.3					
13C-1,2,3,7,8,9-HxCDD	1.11e+08	1.27 y	39:04	-	74.6					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.68e+07		24:02	1.10	36.4		2.50	-	*	22
Total Penta-Dioxins	1.45e+08		30:09	0.90	126		2.50	-	*	17
Total Hexa-Dioxins	1.77e+08		36:01	0.85	203		2.50	-	*	19
Total Hepta-Dioxins	8.69e+07		41:36	0.86	94.3		2.50	-	*	32
Total Tetra-Furans	5.68e+07		22:57	0.99	33.5		2.50	-	*	29
1st Fn. Tot Penta-Furans	7.92e+07		28:19	0.84	55.2		2.50	-	*	1 PeCDF
Total Penta-Furans	1.84e+08		30:05	0.84	128		2.50	-	*	19 183
Total Hexa-Furans	2.79e+08		35:08	1.22	246		2.50	-	*	27
Total Hepta-Furans	1.04e+08		42:11	1.25	103		2.50	-	*	20

Analyst: _____ Date: 7/27/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:27JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

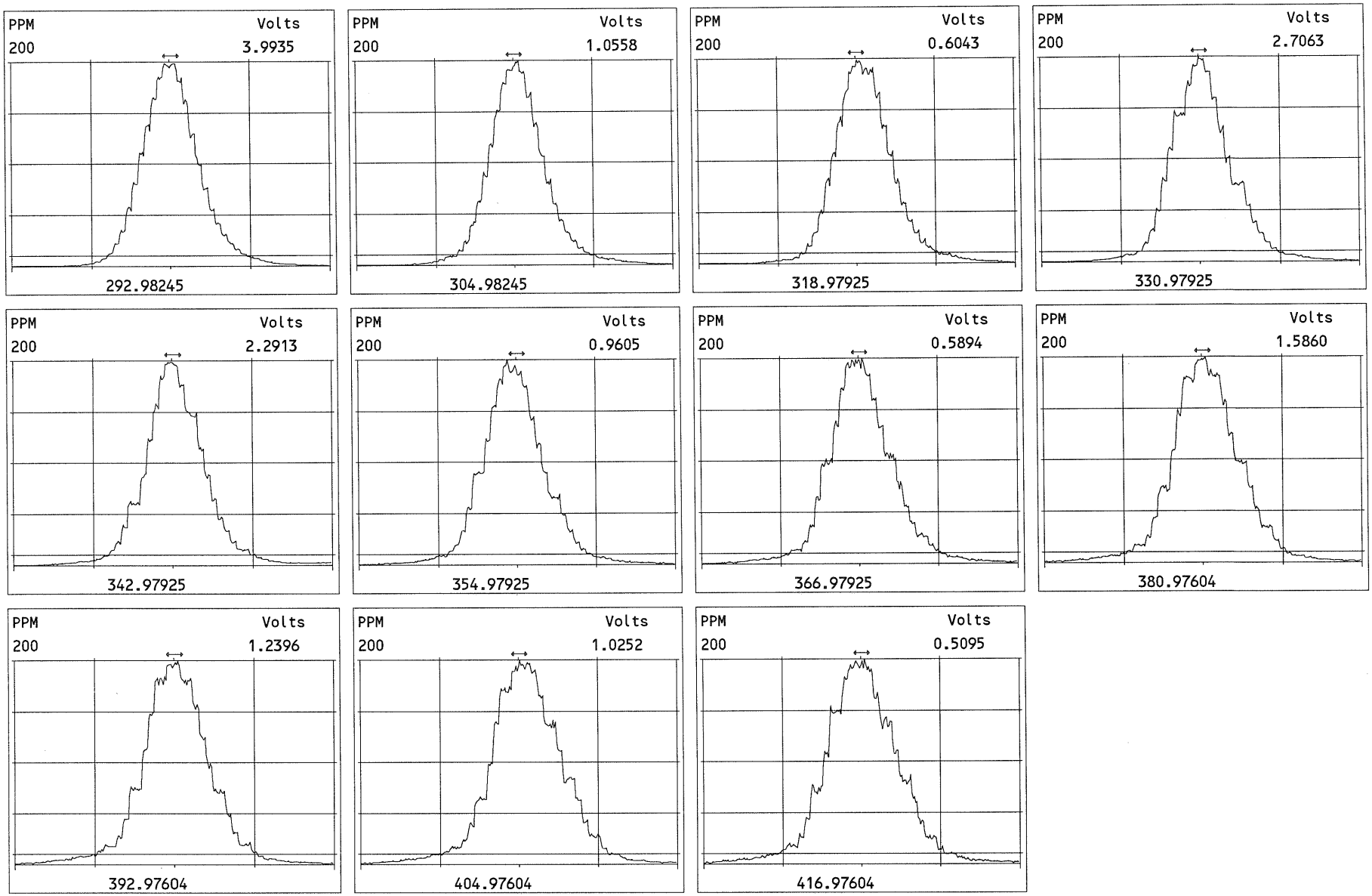
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
27JUL06M	1	ST072706M1	1613 CS3 (051212J)	27-JUL-06 10:33:29	ST072706M1	ST072706M2	TC
27JUL06M	2	3956-001-0001-SA	IG7-S1	27-JUL-06 11:28:52	ST072706M1	ST072706M2	TC
27JUL06M	3	3963-001-0001-SA	061409-08	27-JUL-06 12:24:11	ST072706M1	ST072706M2	TC
27JUL06M	4	3963-002-0001-SA	061409-09	27-JUL-06 13:19:31	ST072706M1	ST072706M2	TC
27JUL06M	5	3963-003-0001-SA	061409-10	27-JUL-06 14:14:54	ST072706M1	ST072706M2	TC
27JUL06M	6	3967-001-0001-SA	C-4, S-1	27-JUL-06 15:10:18	ST072706M1	ST072706M2	TC
27JUL06M	7	SB072706M1	Solvent Blank	27-JUL-06 16:05:42	ST072706M1	ST072706M2	TC
27JUL06M	8	ST072706M2	1613 CS3 (051212J)	27-JUL-06 17:01:01	ST072706M2	ST072706M3	TC

18 7/28/06

Data Backed Up:_____

Date:_____

Peak Locate Examination:27-JUL-2006:10:31 File:27JUL06M
Experiment:PCDD Function:1 Reference:PFK



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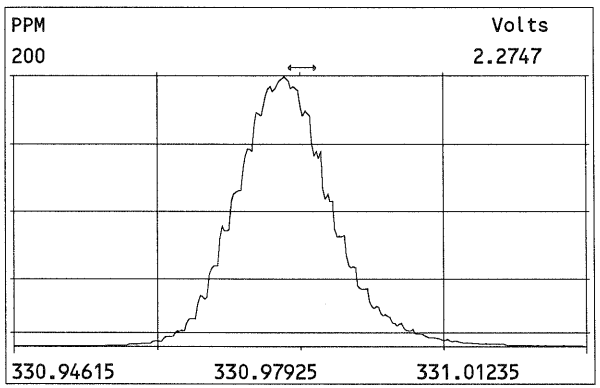
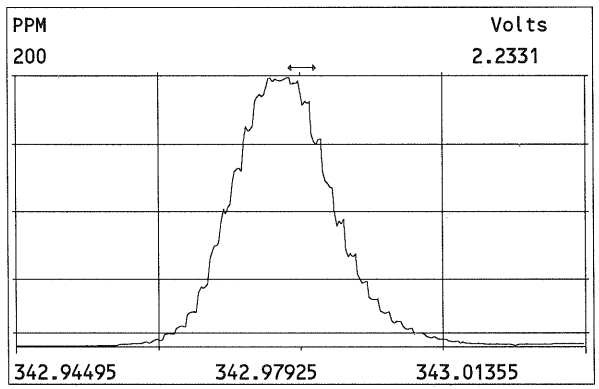
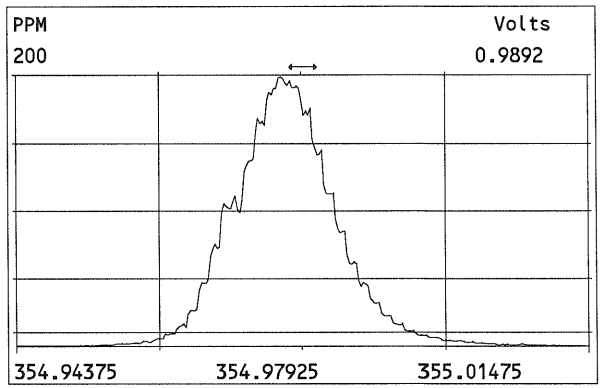
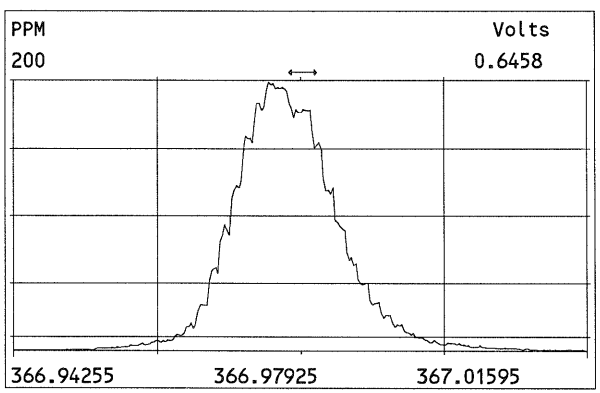
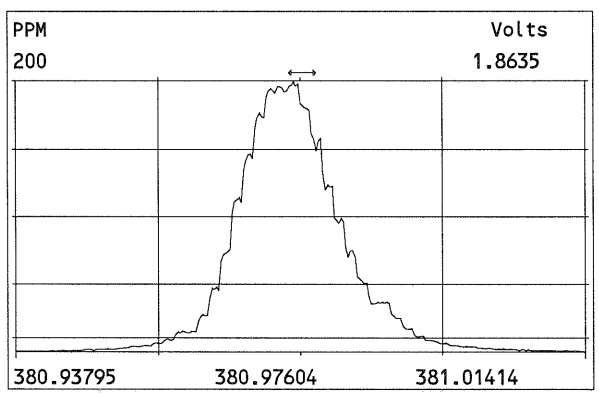
Experiment:PCDD Function:2 Reference:PFK

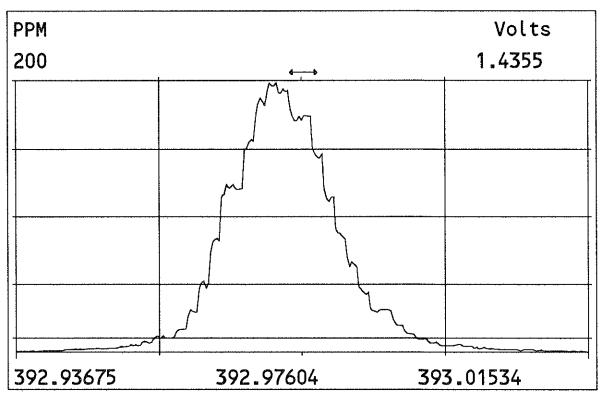


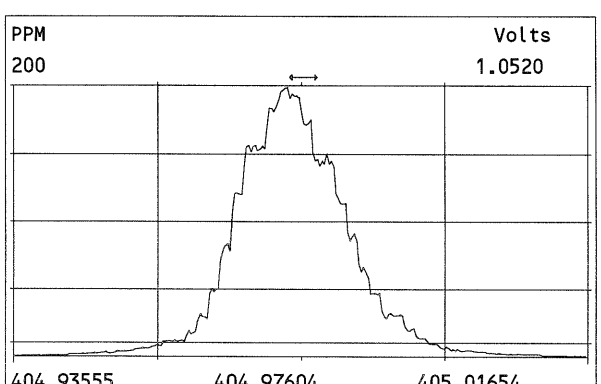


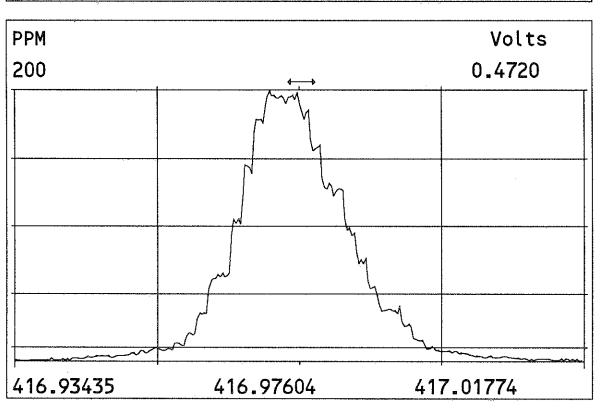












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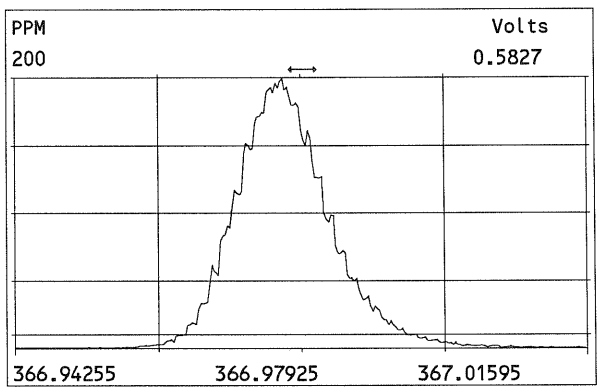
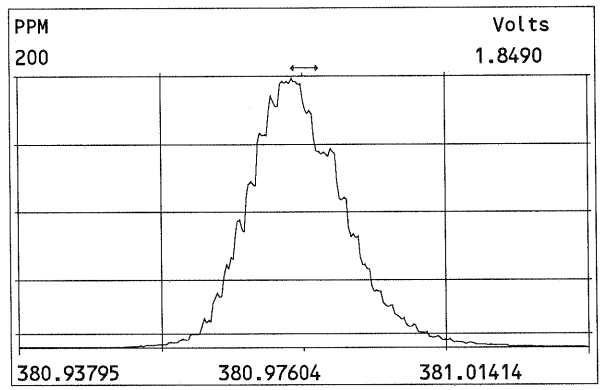
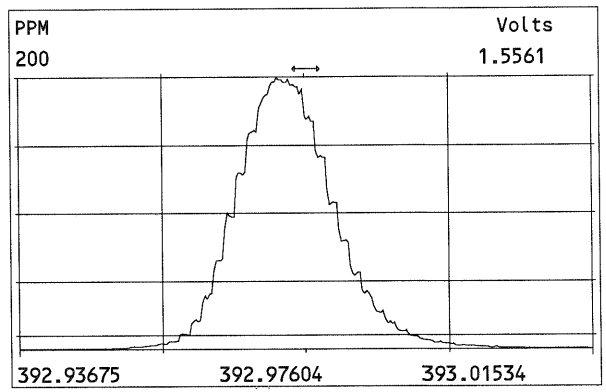
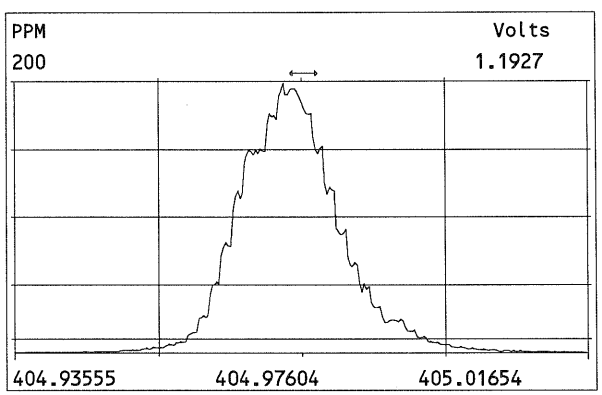
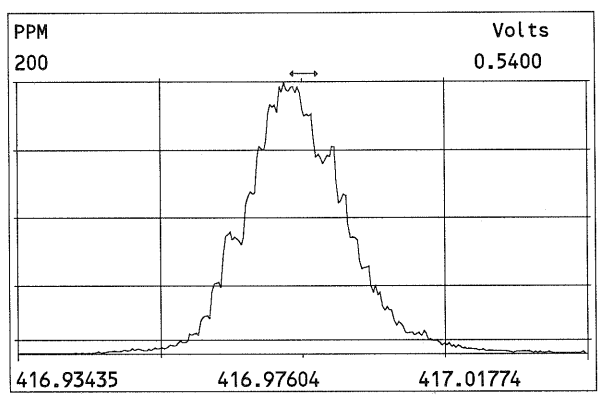
Experiment:PCDD Function:3 Reference:PFK

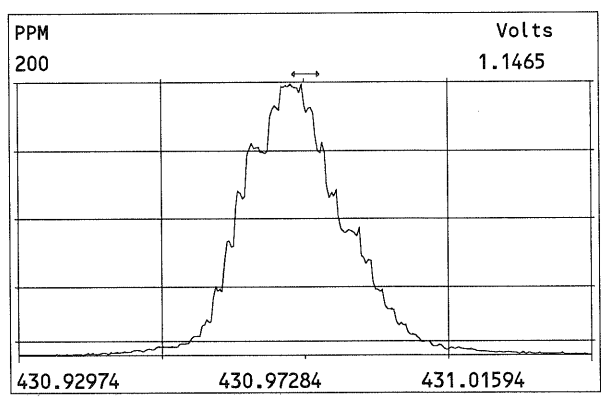


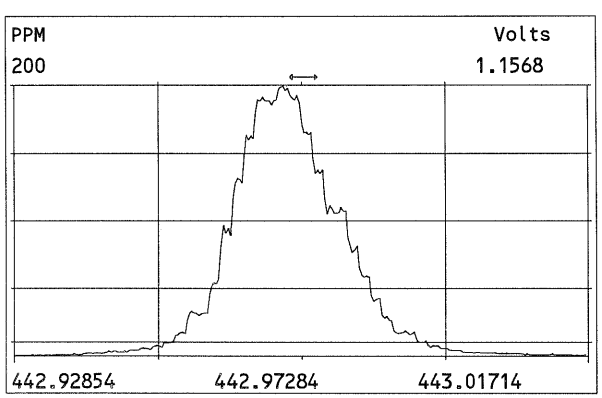


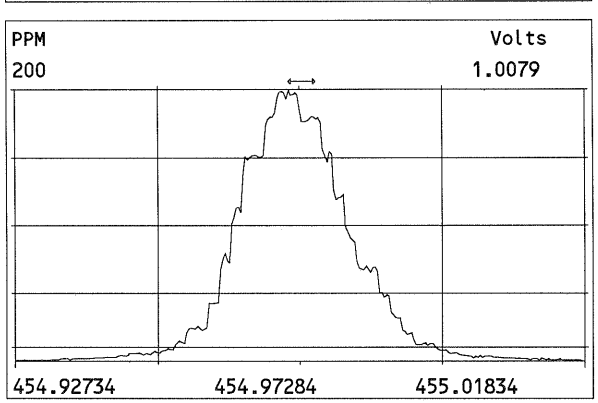




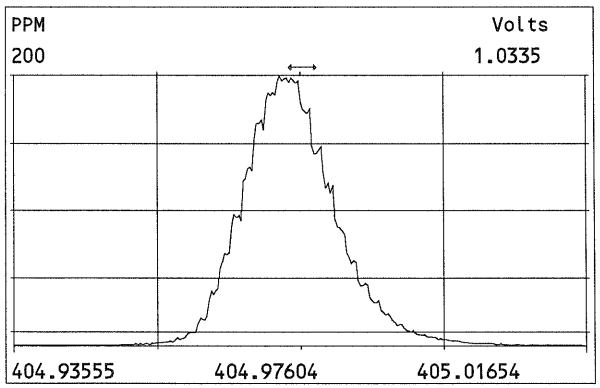


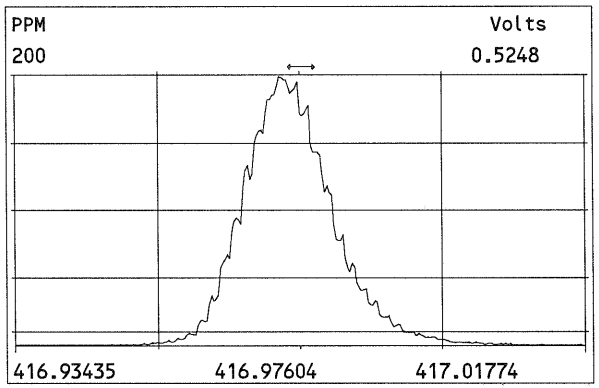


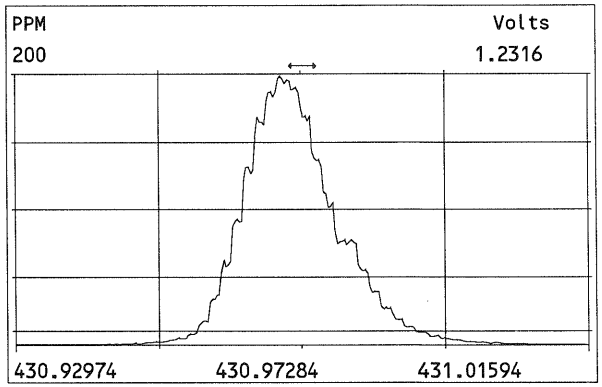


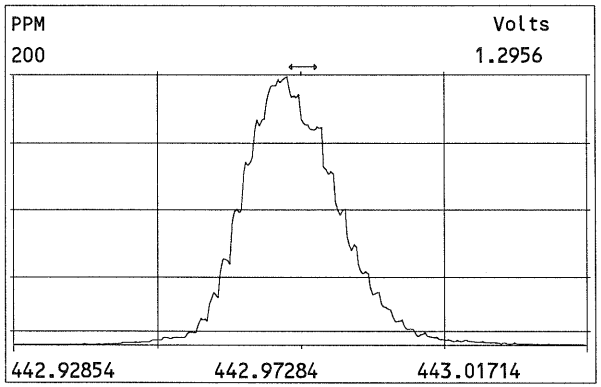


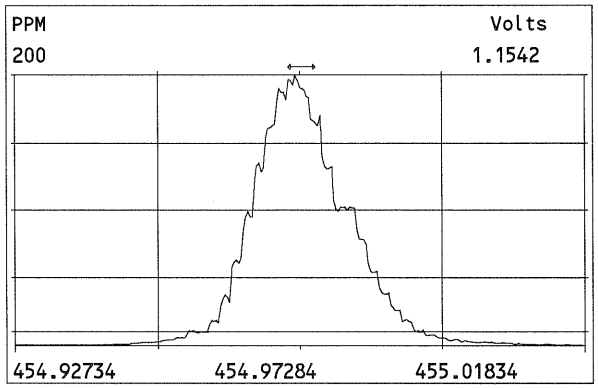
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:4 Reference:PFK

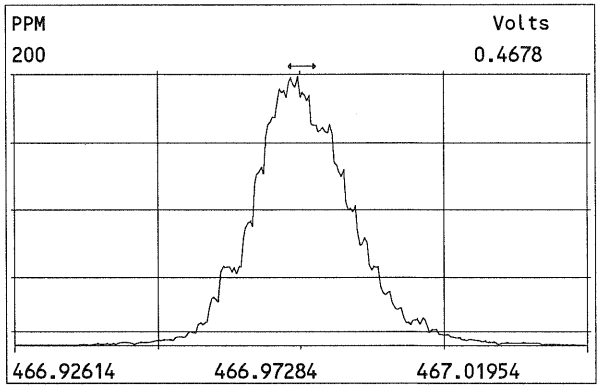


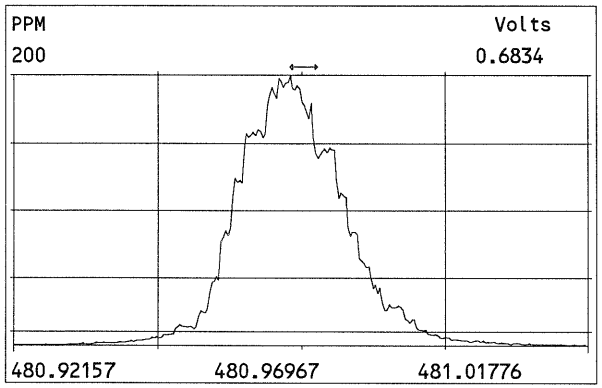




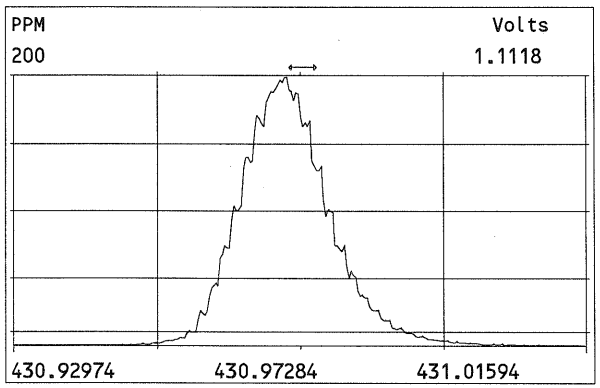


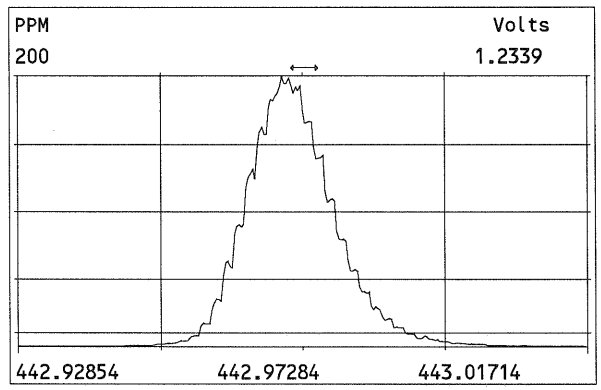


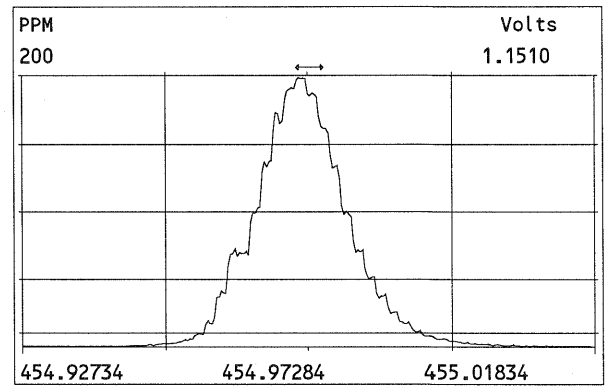


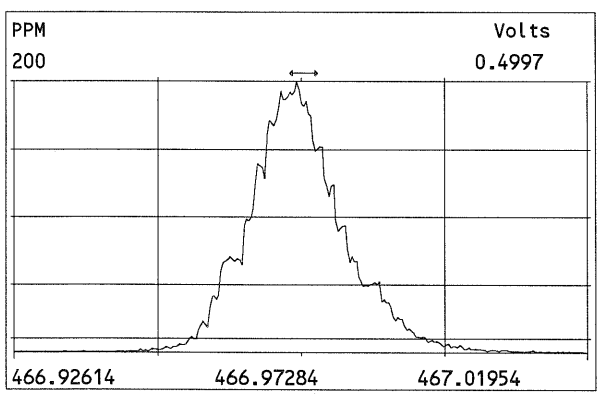


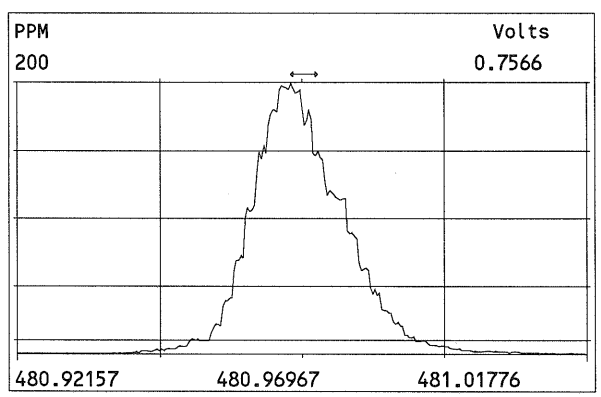
Peak Locate Examination:27-JUL-2006:10:33 File:27JUL06M
Experiment:PCDD Function:5 Reference:PFK

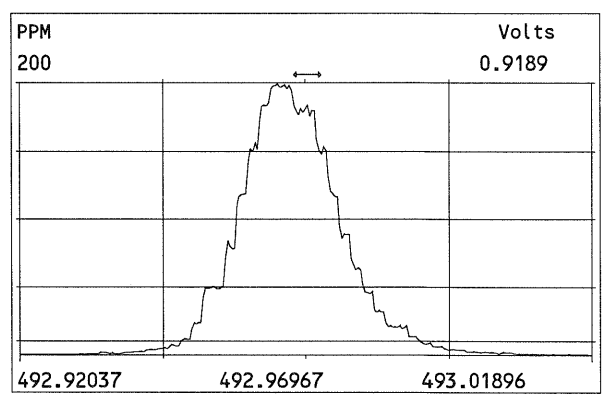


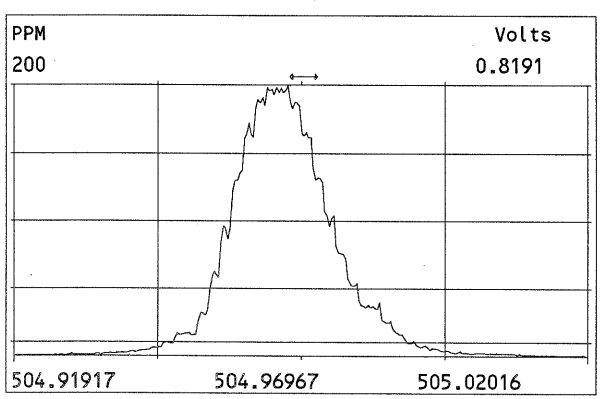


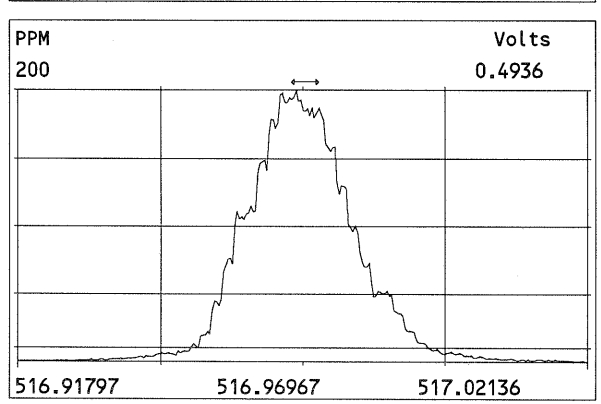




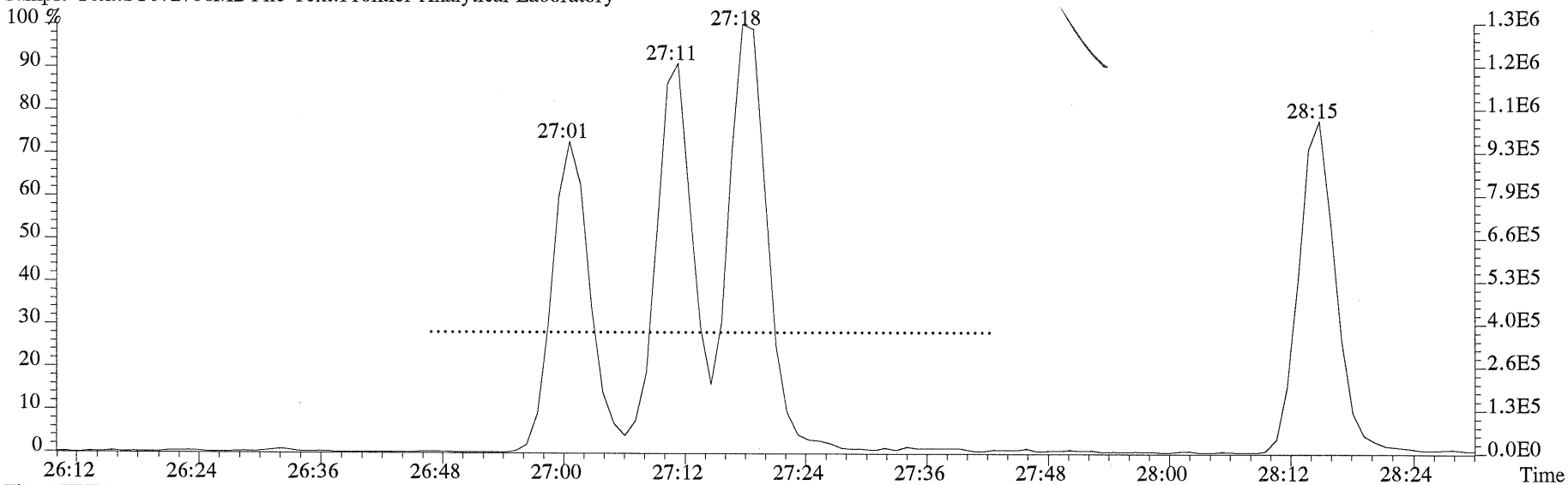




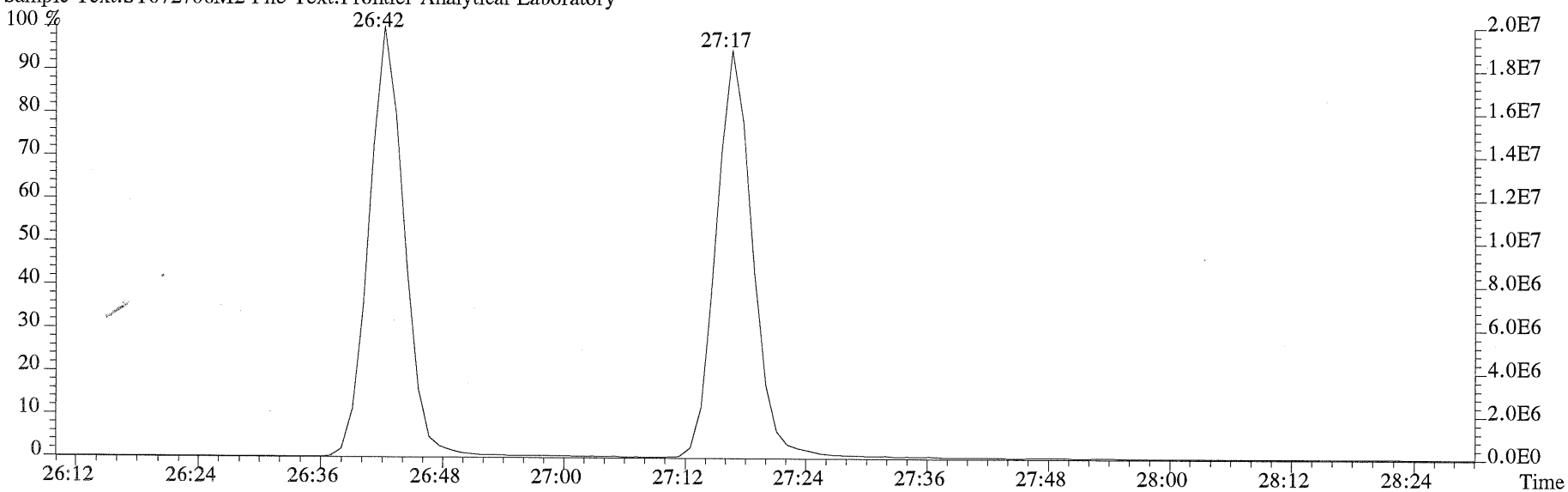




File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:8 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

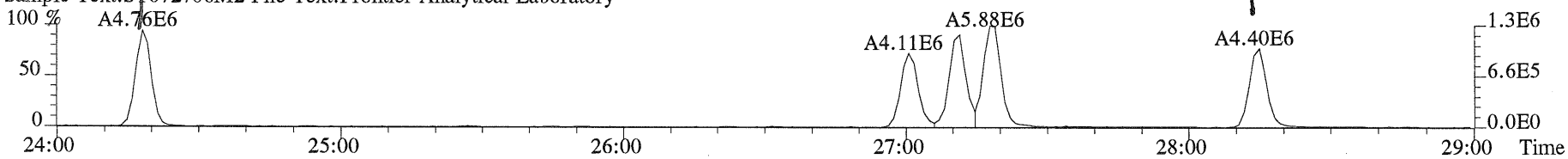


File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:8 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

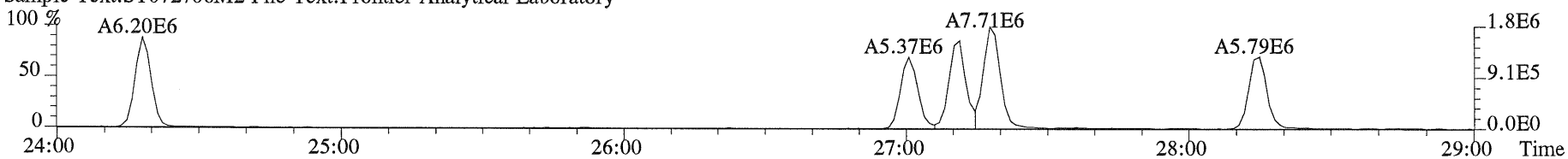


395

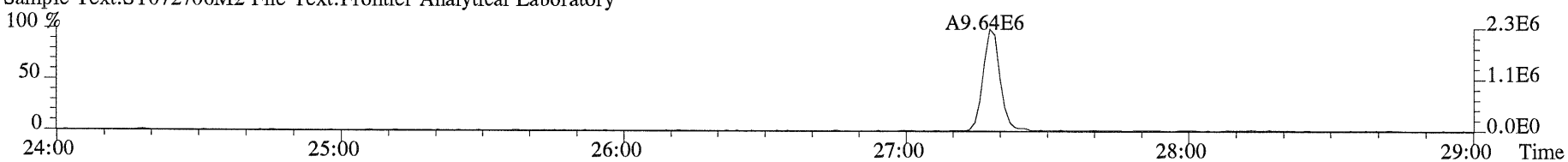
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



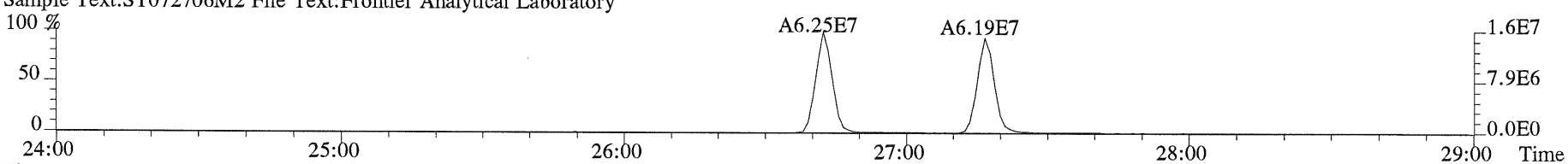
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



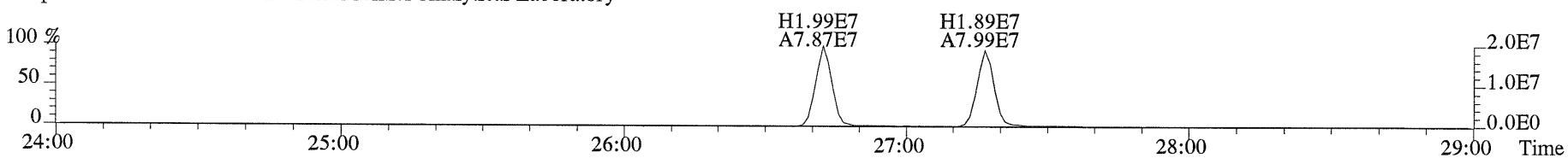
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



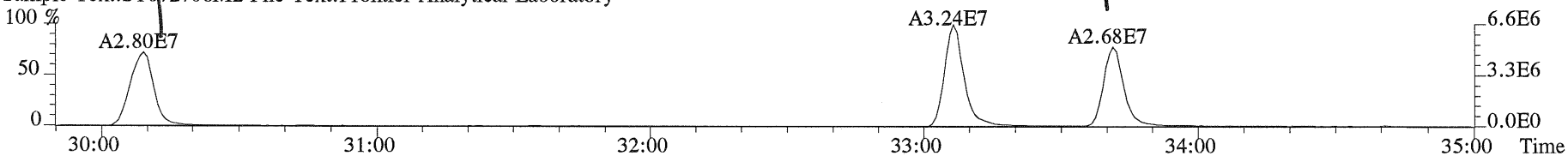
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



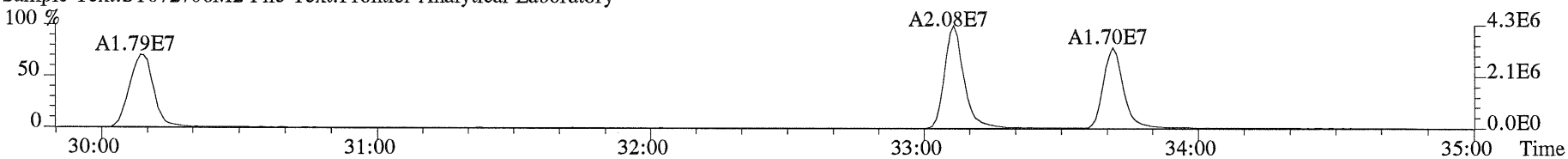
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



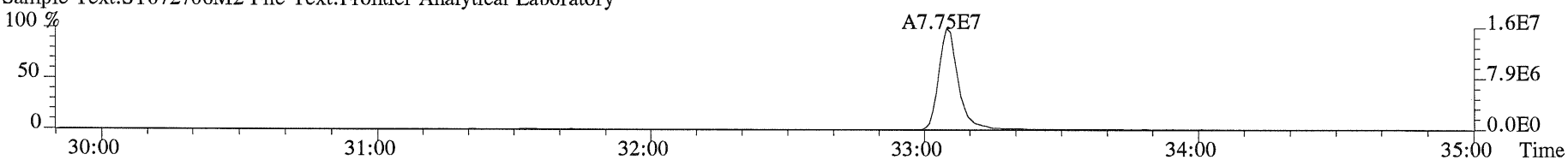
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



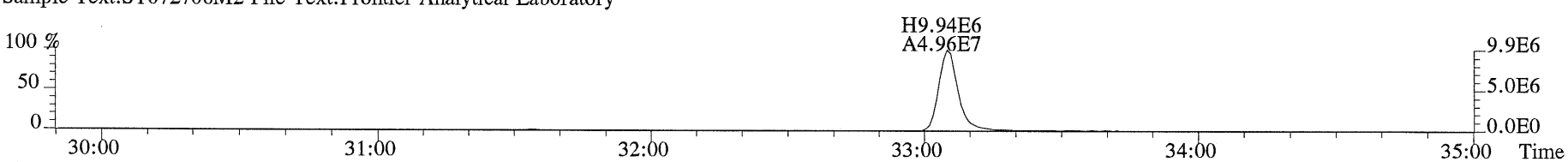
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



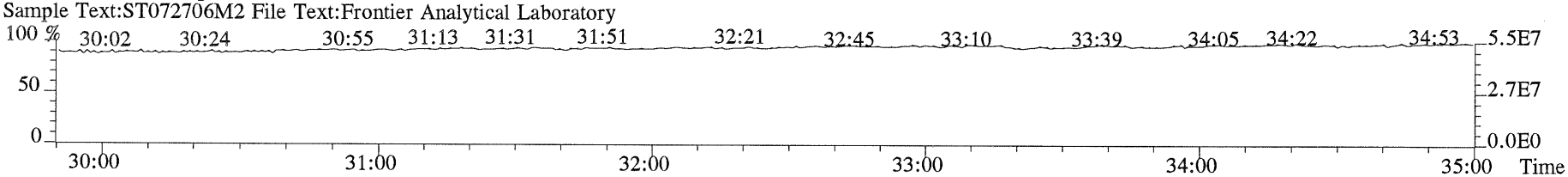
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



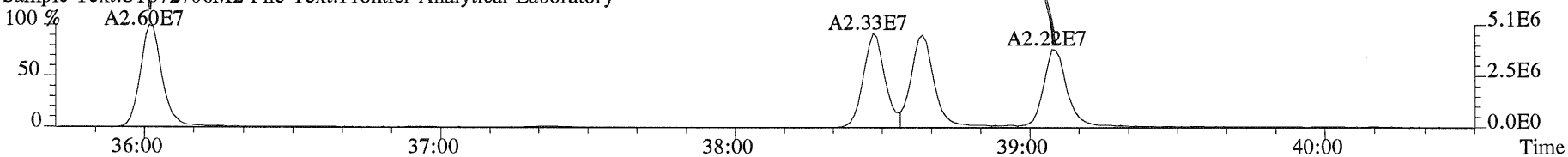
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



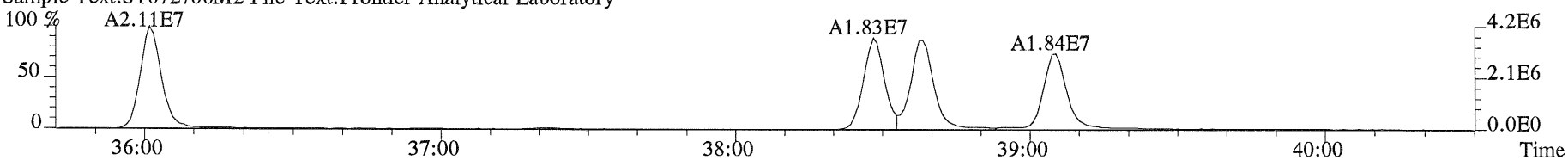
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:8 F:2 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



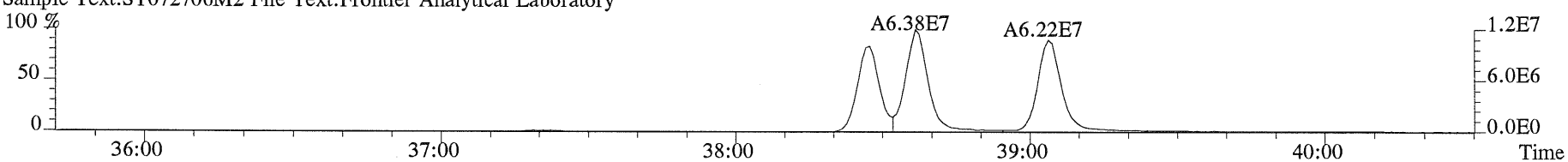
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



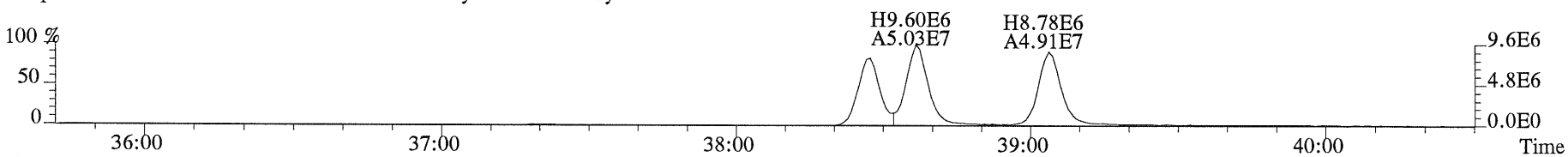
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



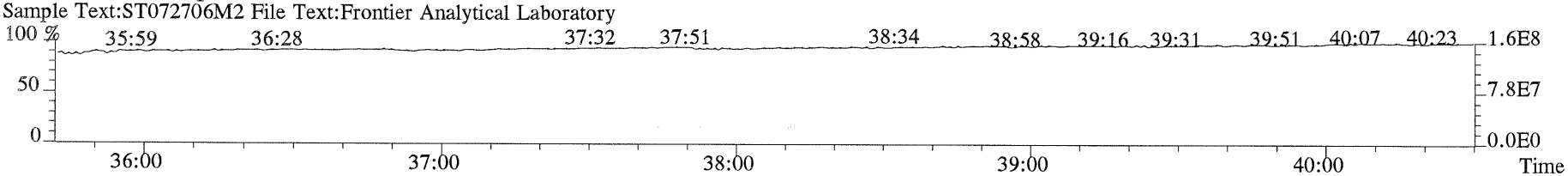
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



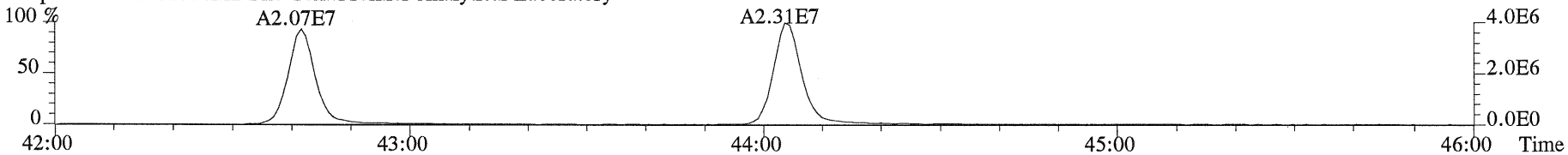
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



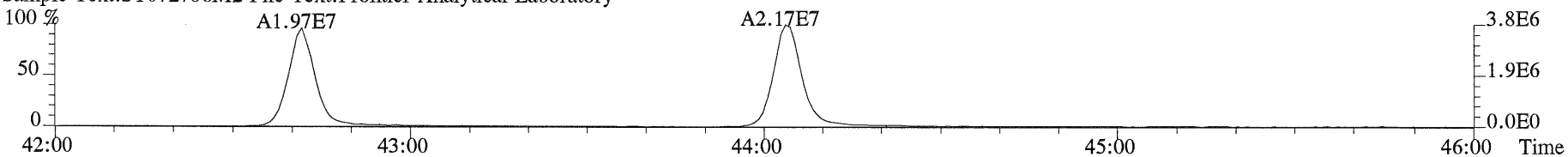
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:8 F:3 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



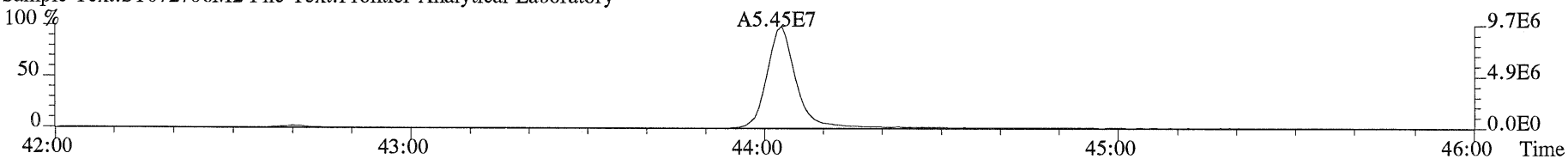
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



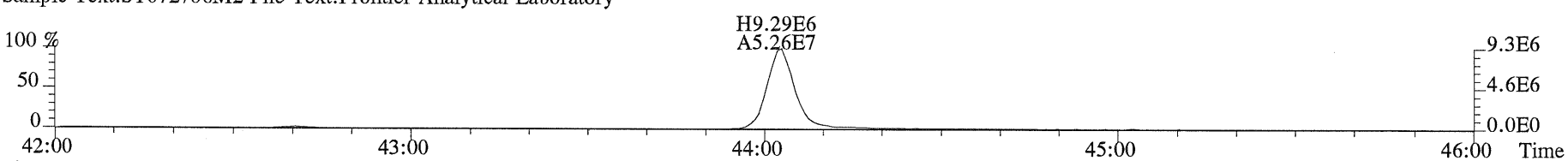
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



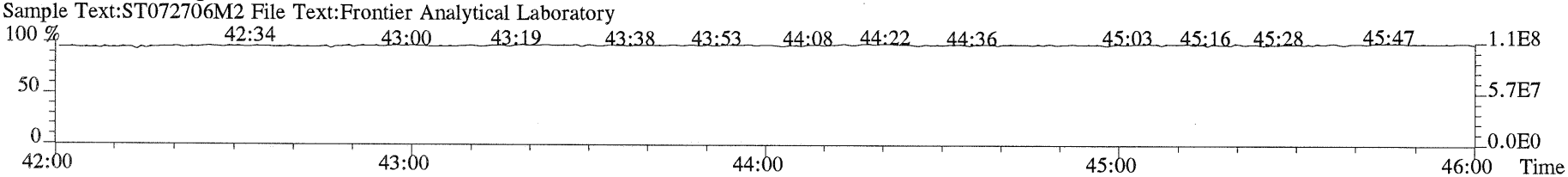
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



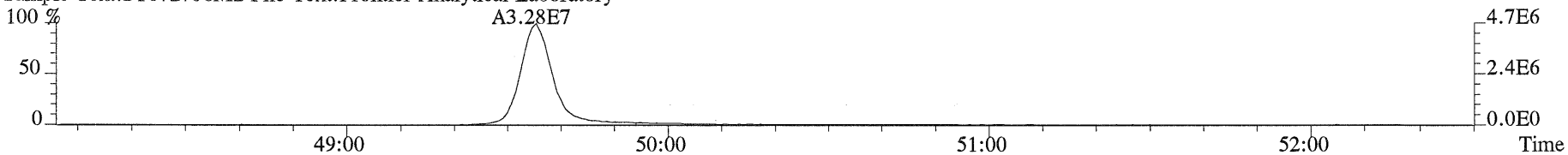
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



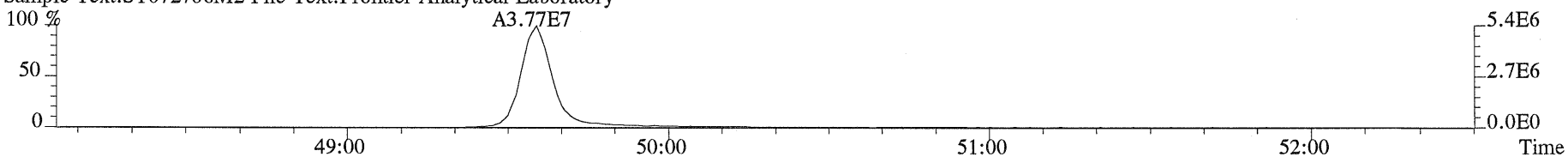
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:8 F:4 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



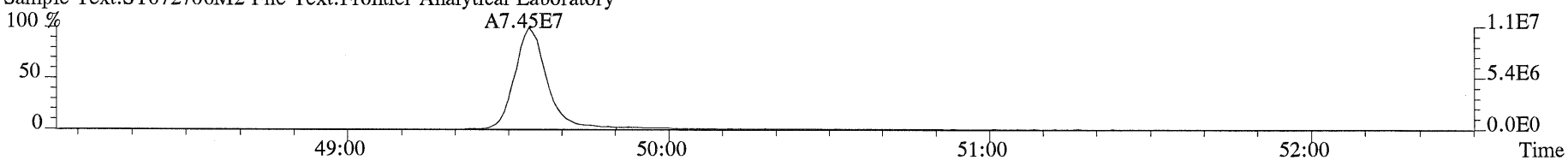
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



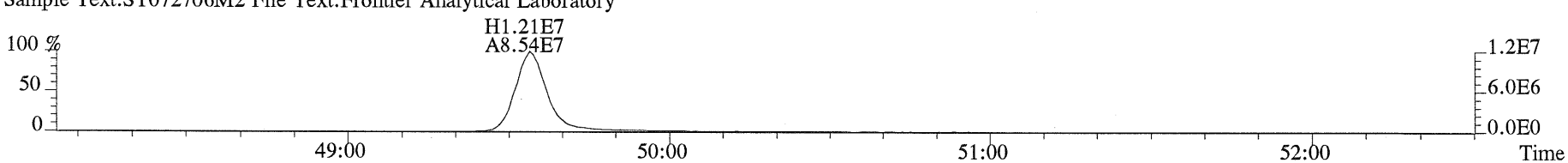
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



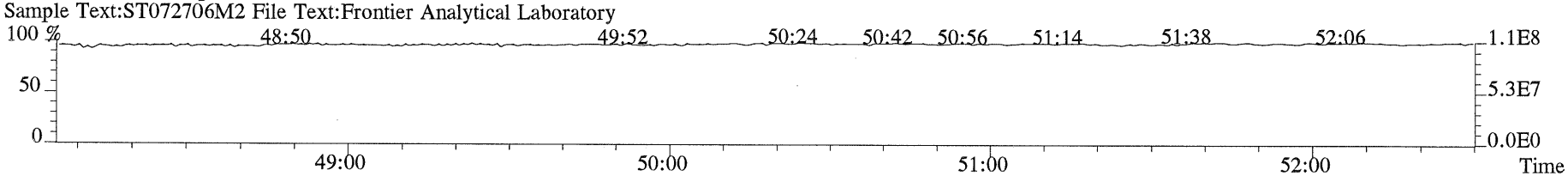
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



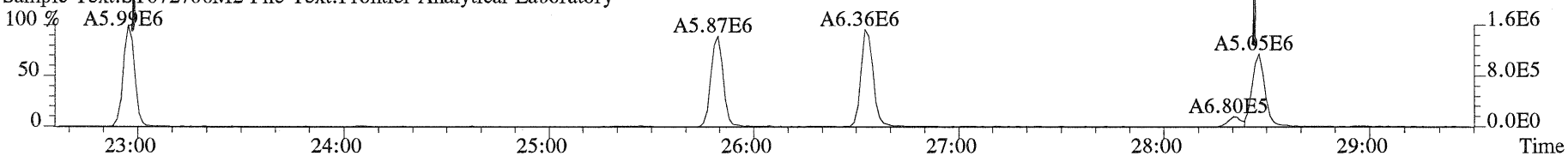
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



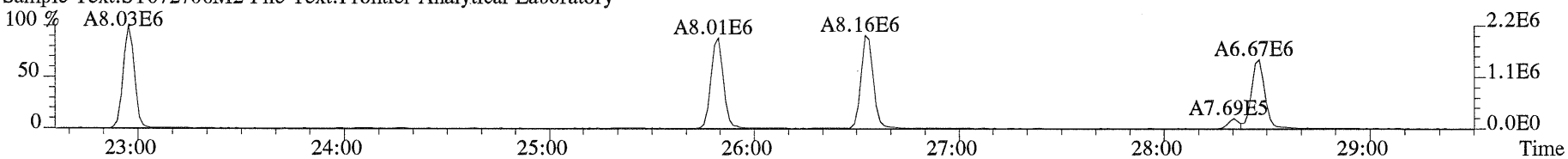
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:8 F:5 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



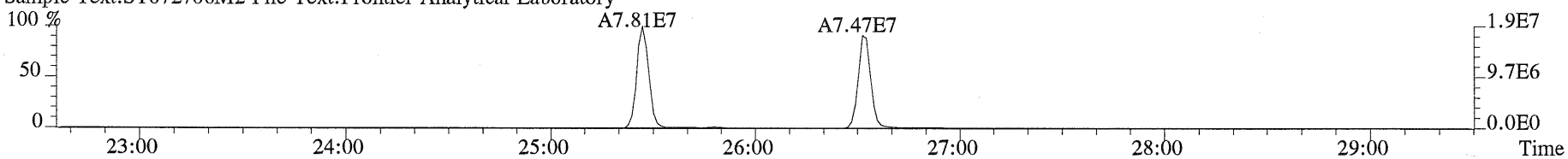
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



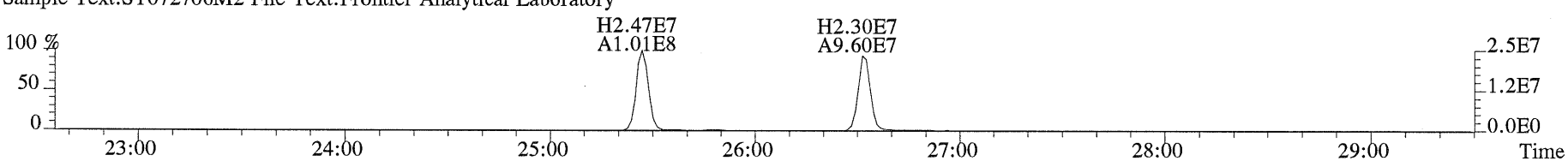
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



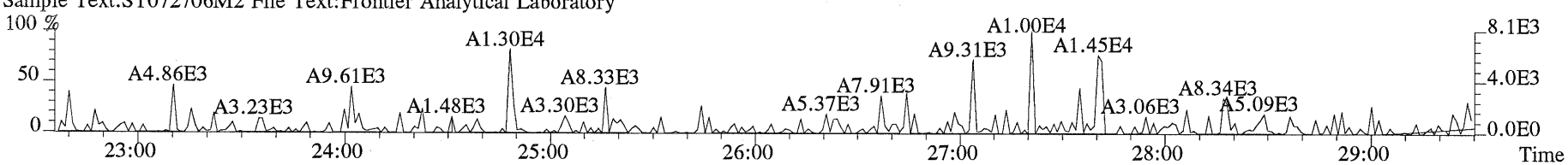
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



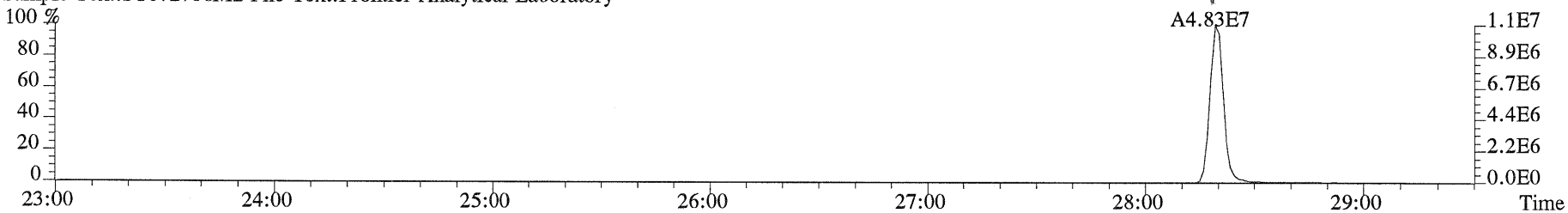
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



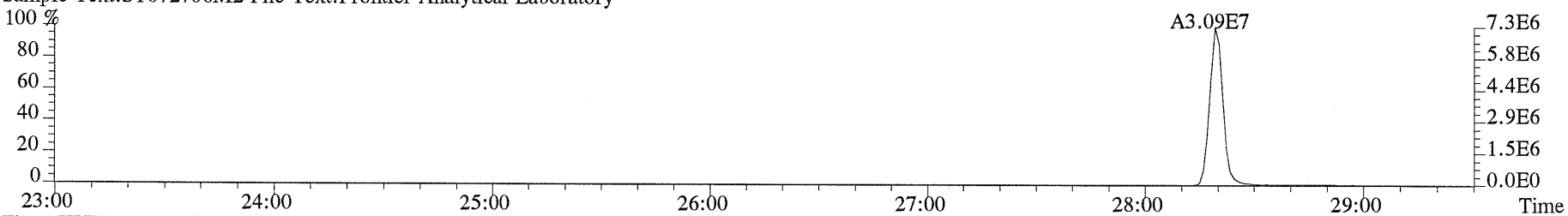
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



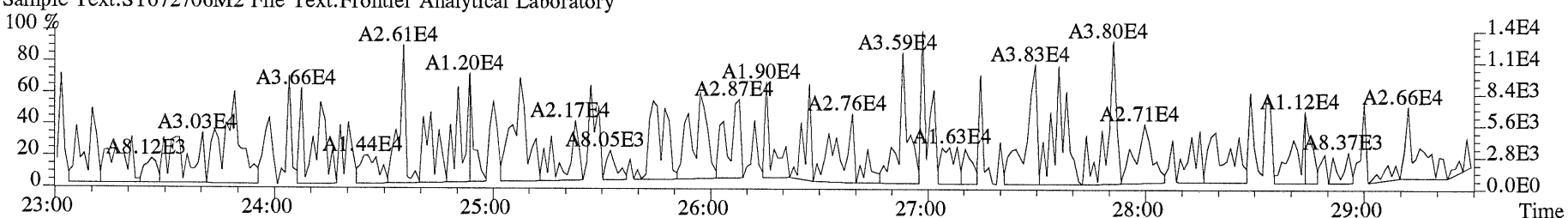
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



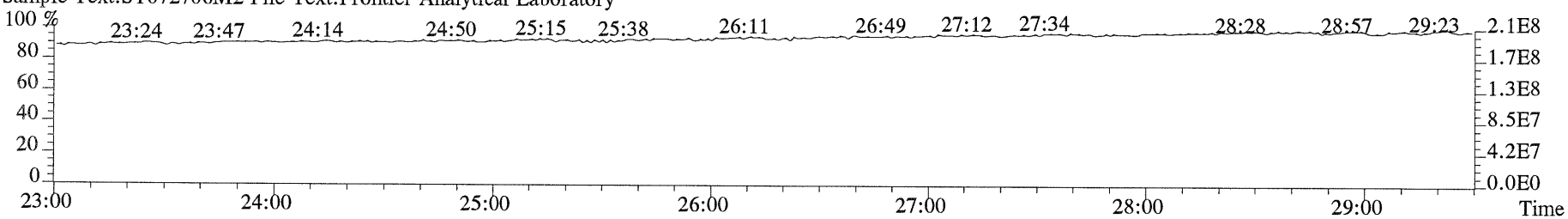
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



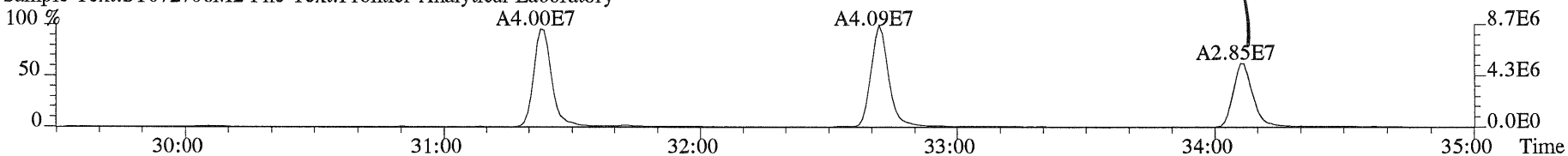
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



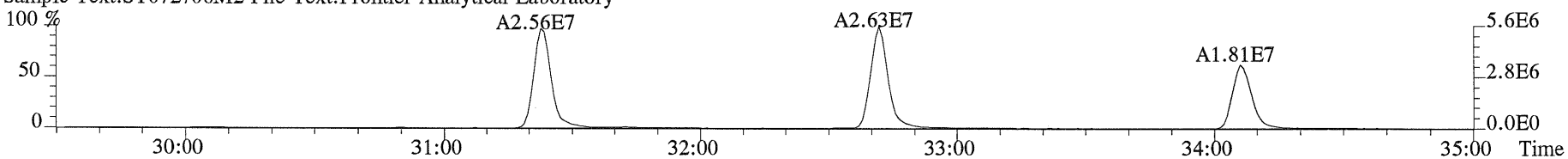
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:8 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



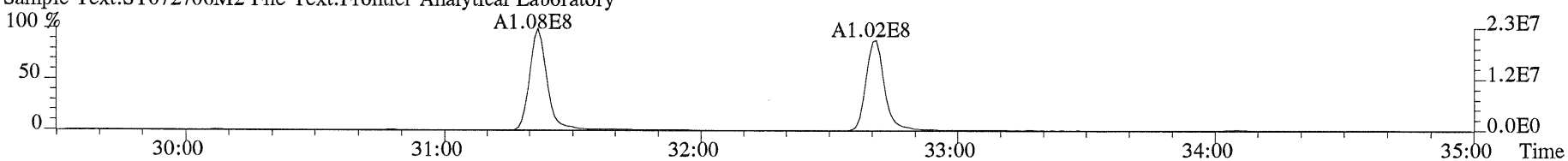
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



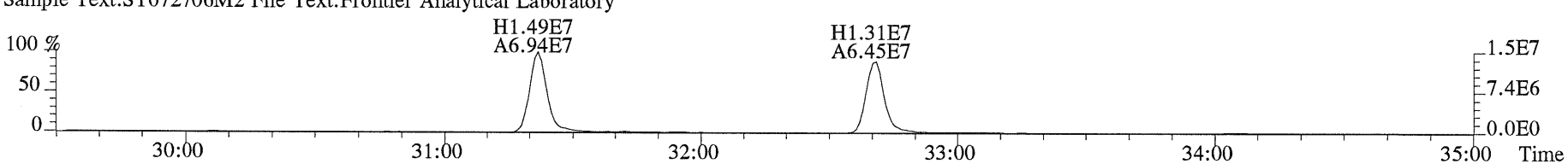
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



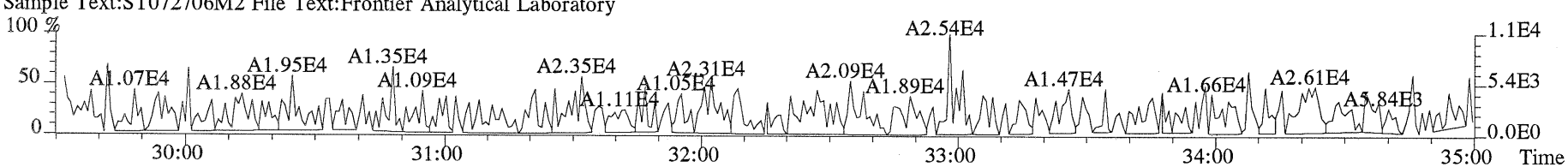
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



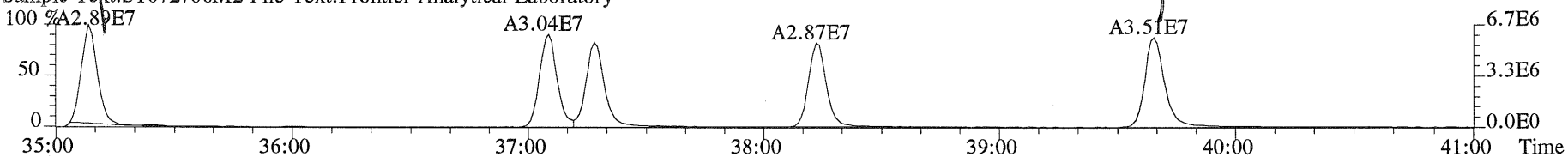
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



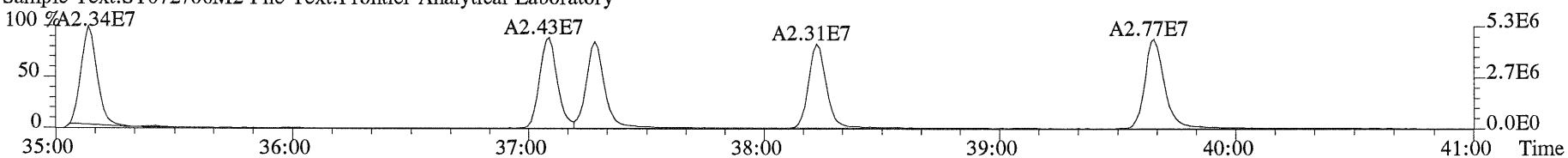
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



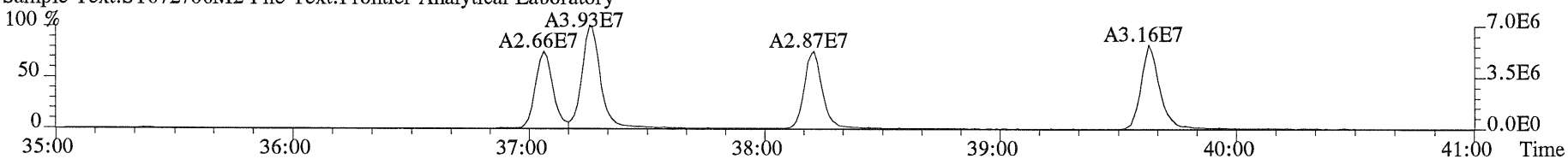
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



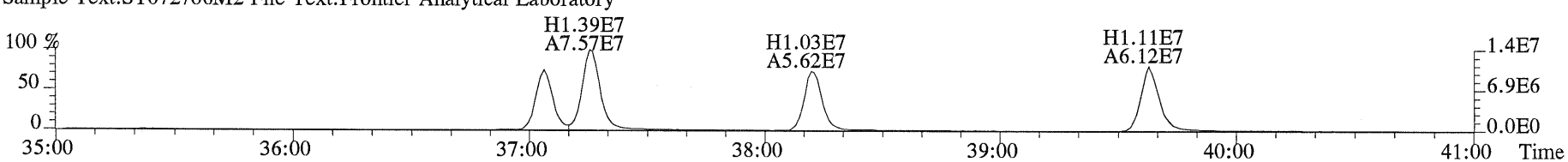
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



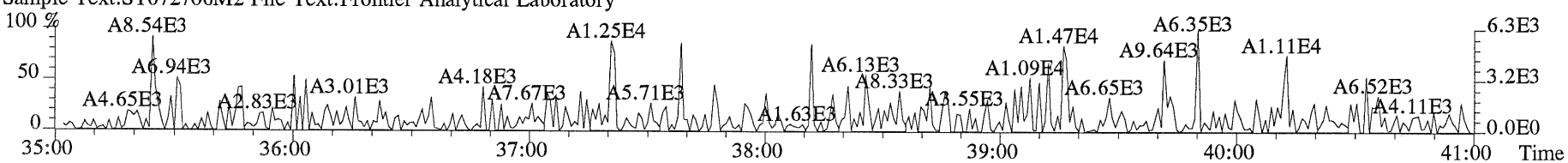
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



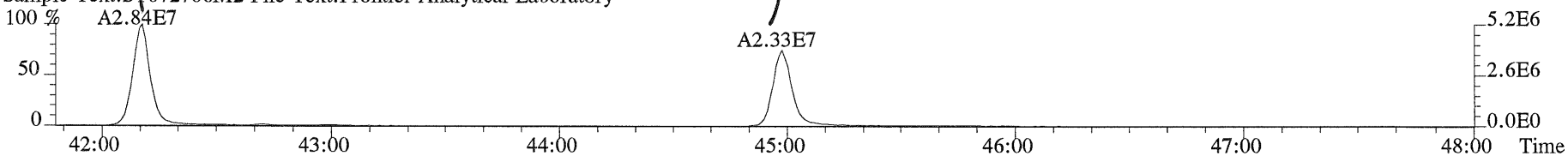
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



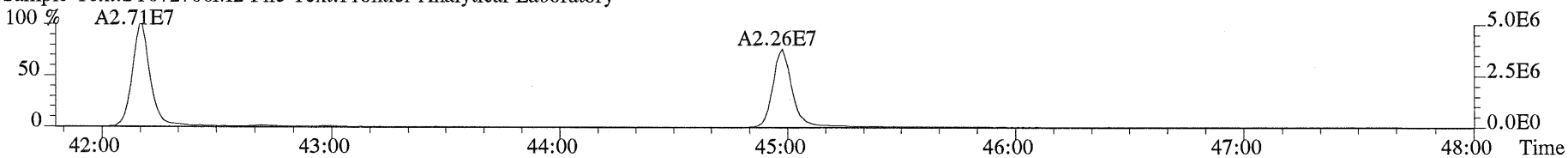
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



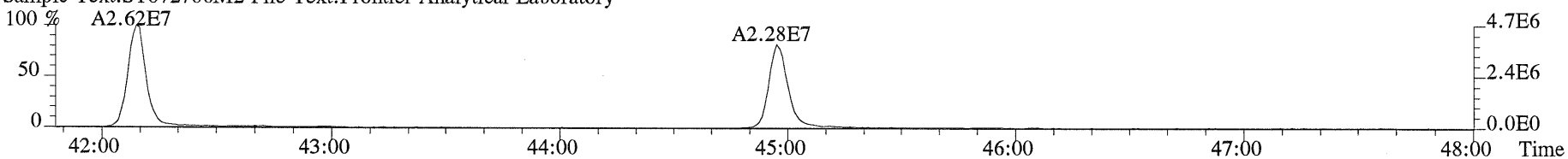
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



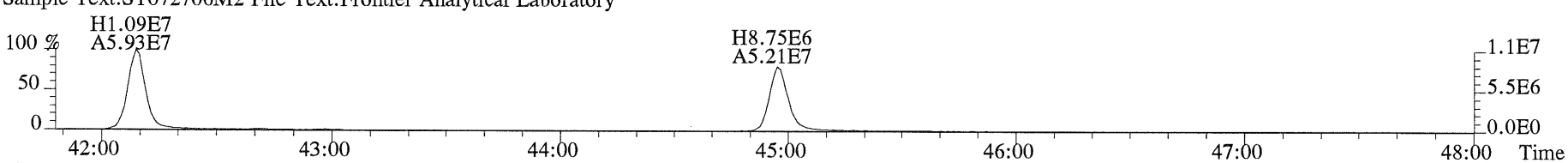
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



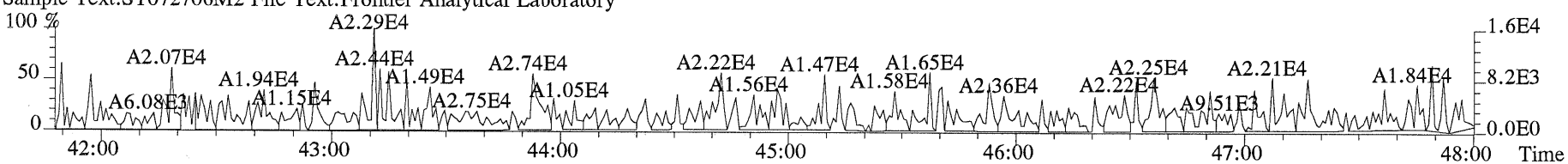
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



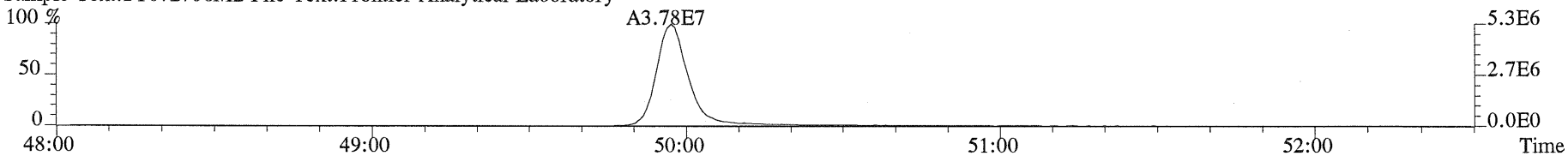
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



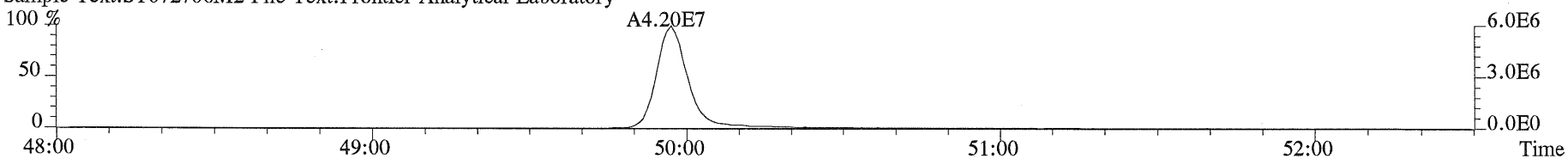
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



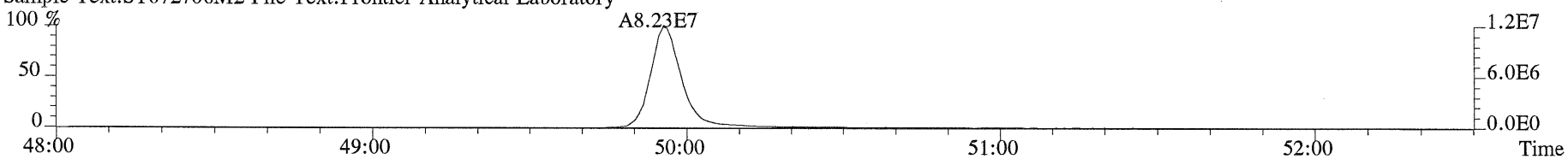
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



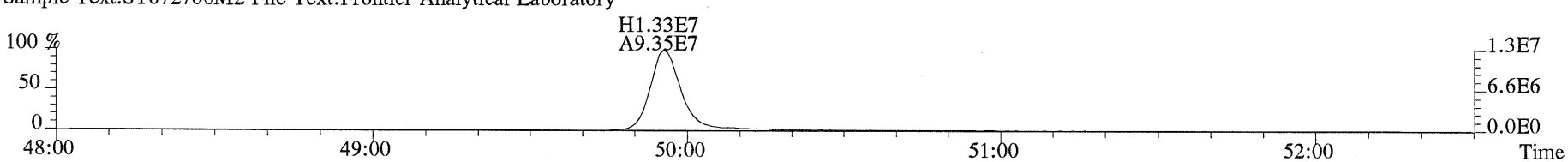
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



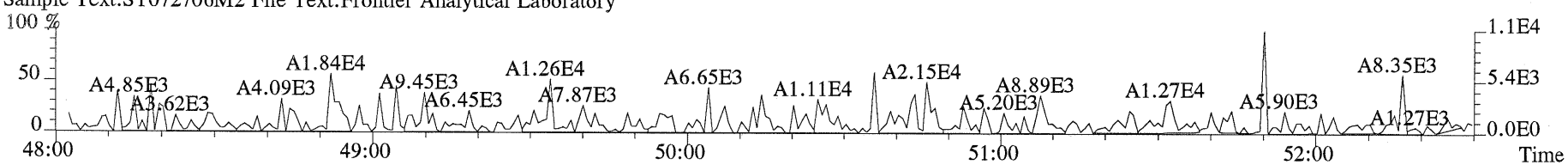
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



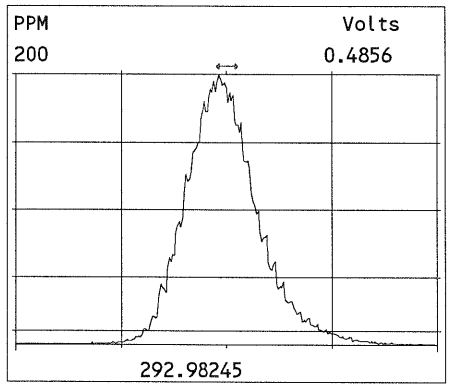
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

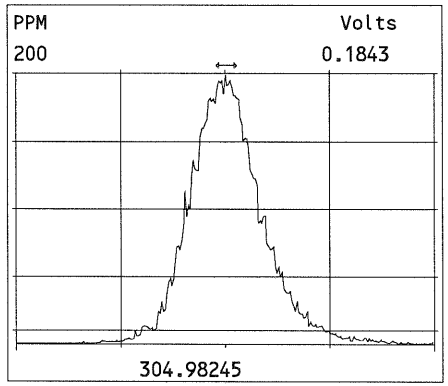


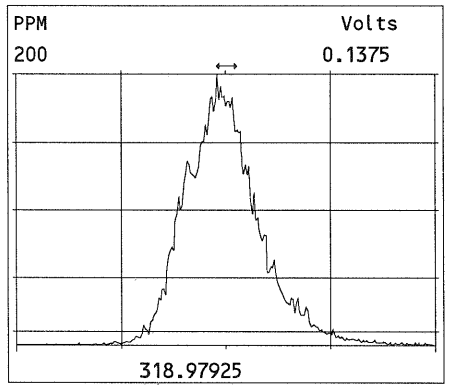
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

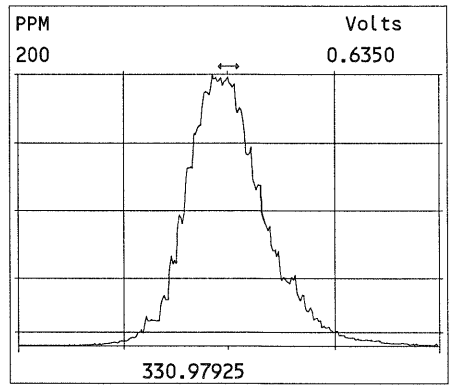


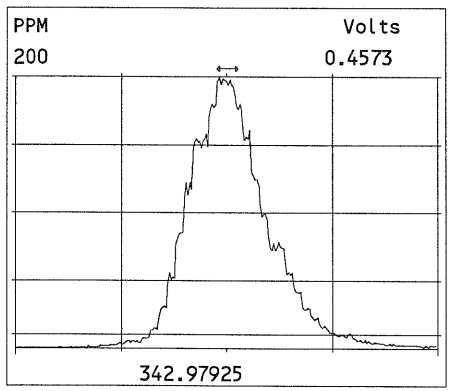
Peak Locate Examination:28-JUL-2006:03:12 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

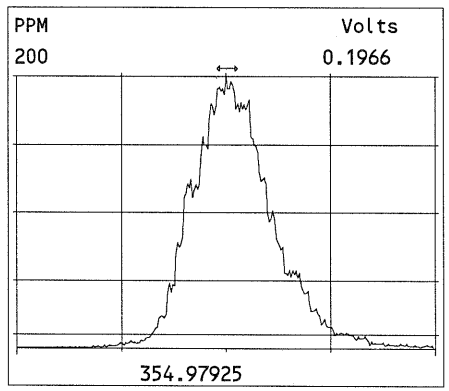


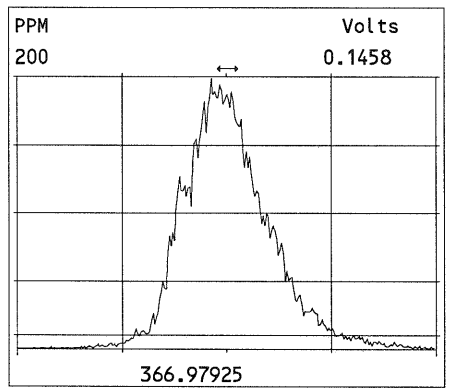


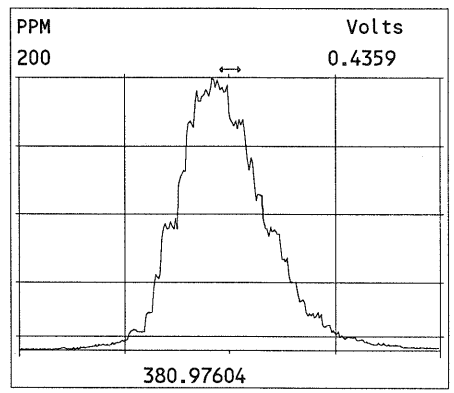


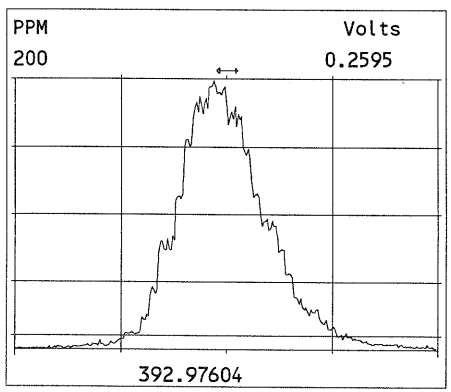


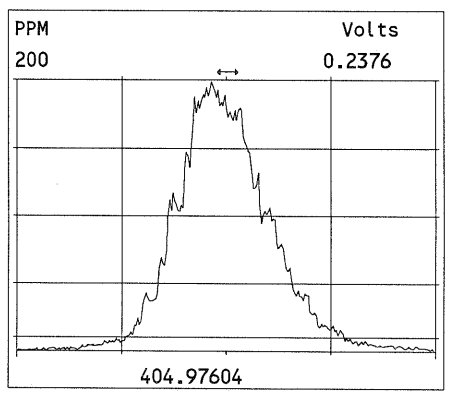


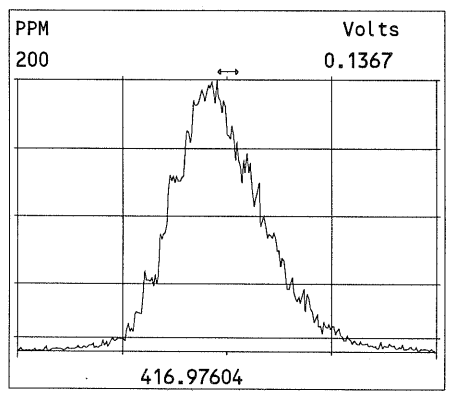




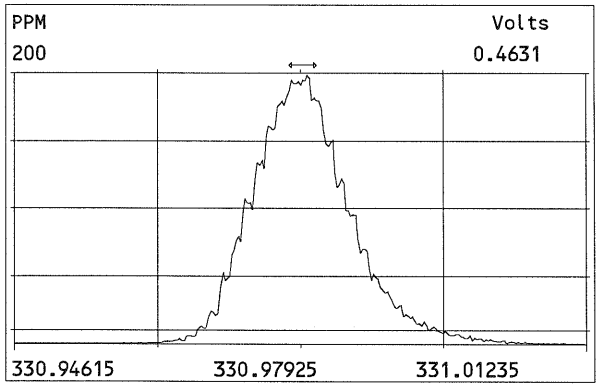


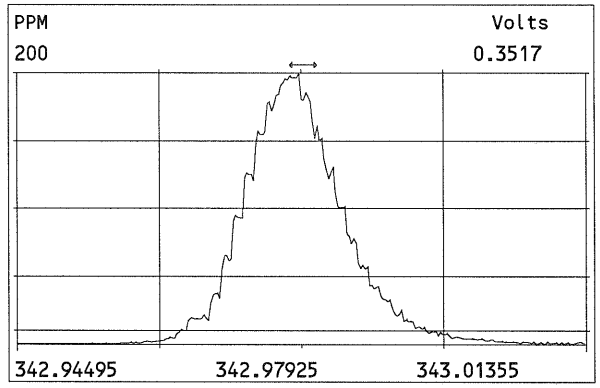


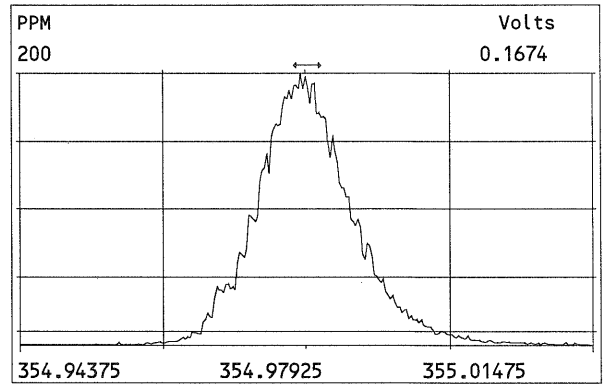


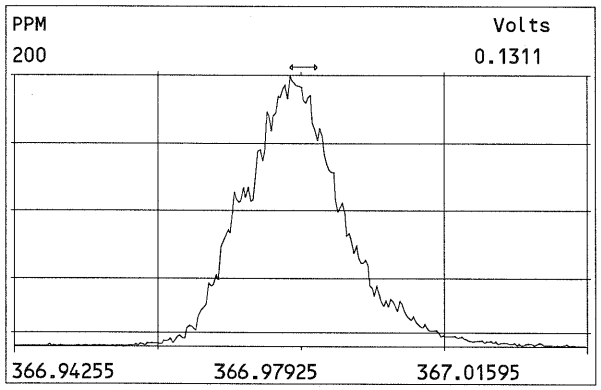


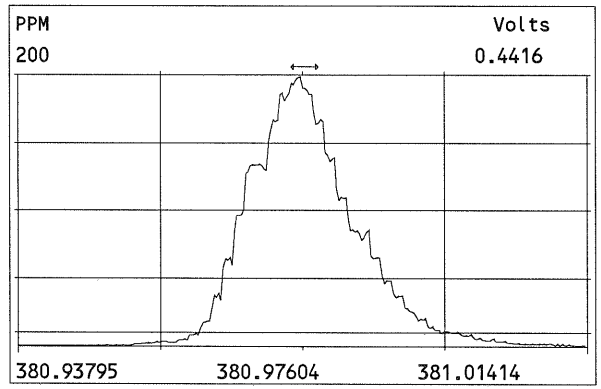
Peak Locate Examination:28-JUL-2006:03:14 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

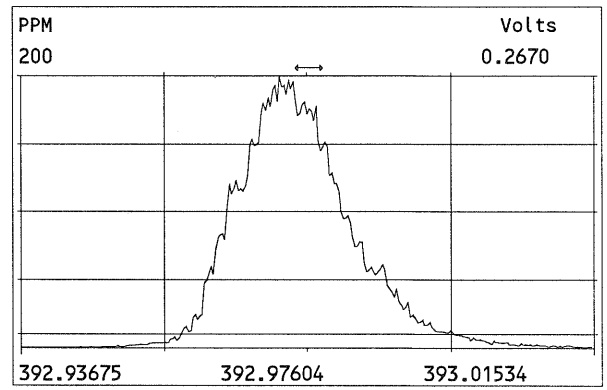


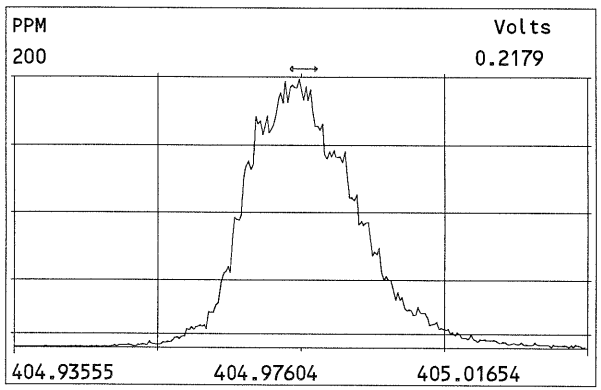


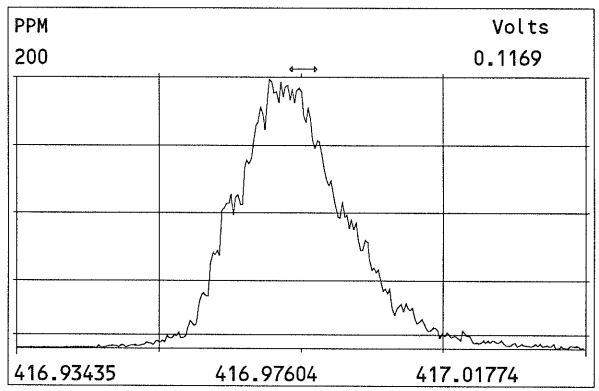






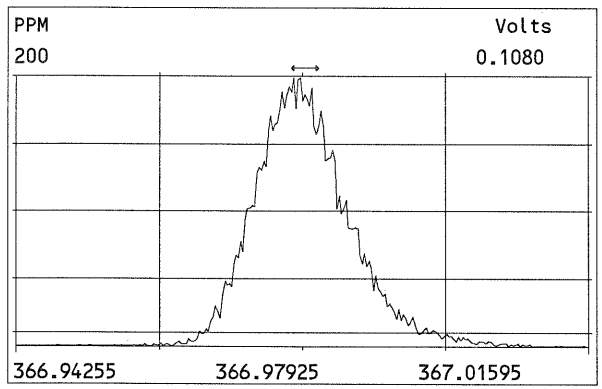


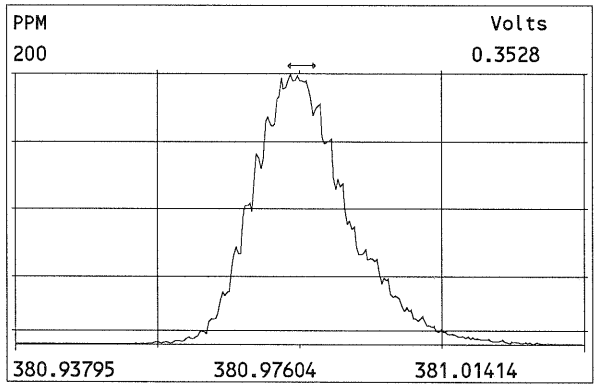


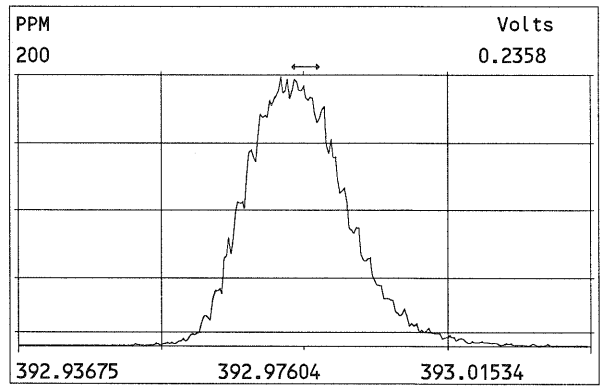


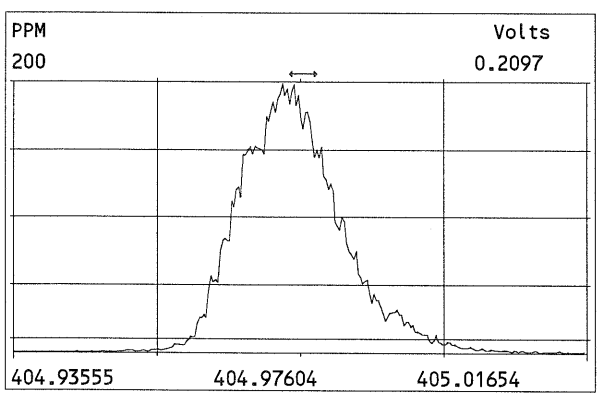
408

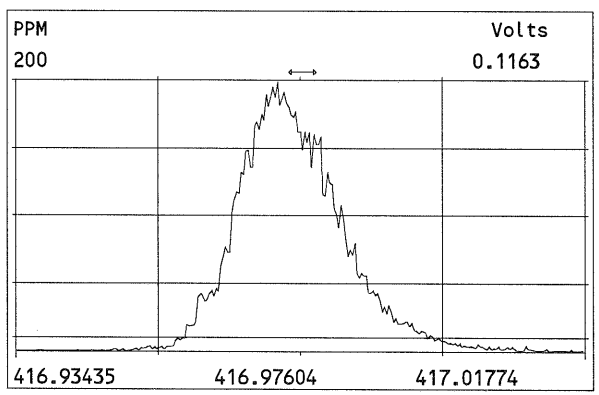
Peak Locate Examination:28-JUL-2006:03:16 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

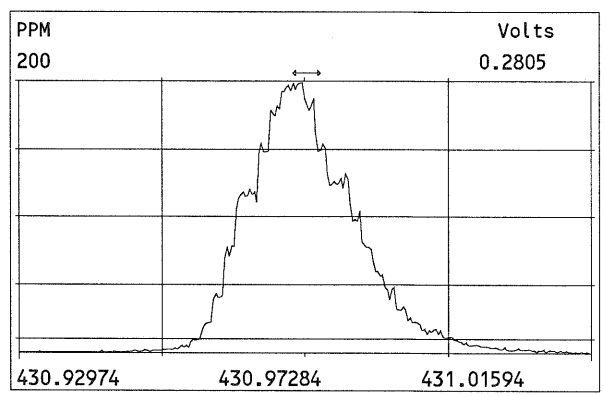


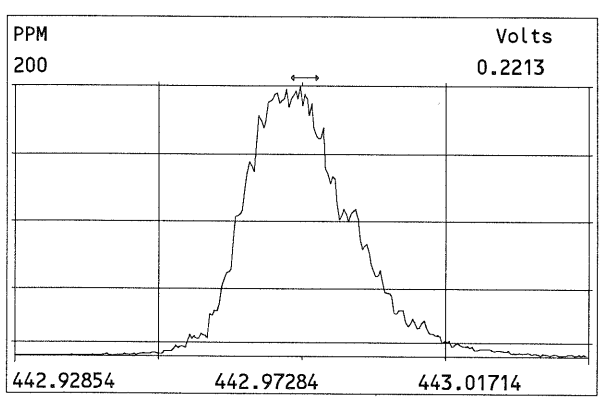


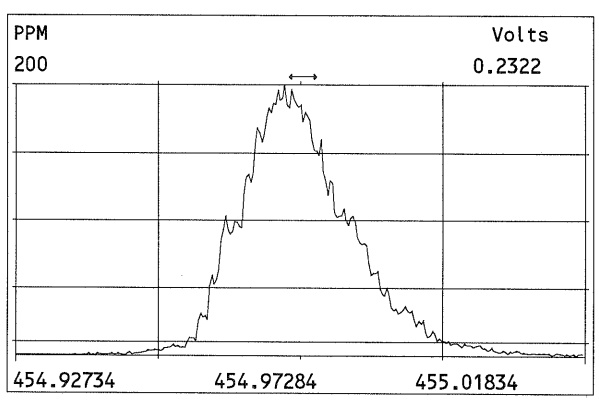






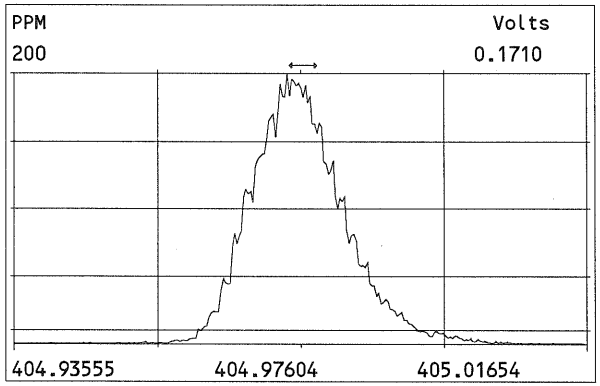


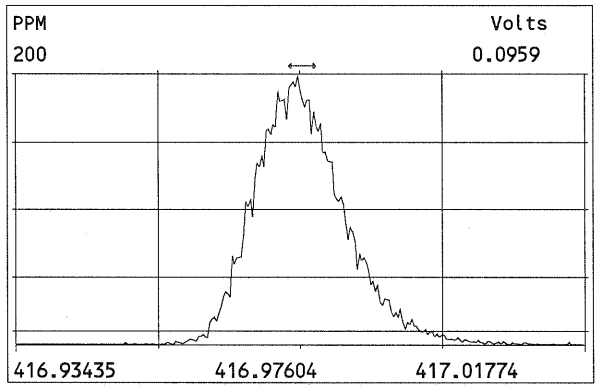


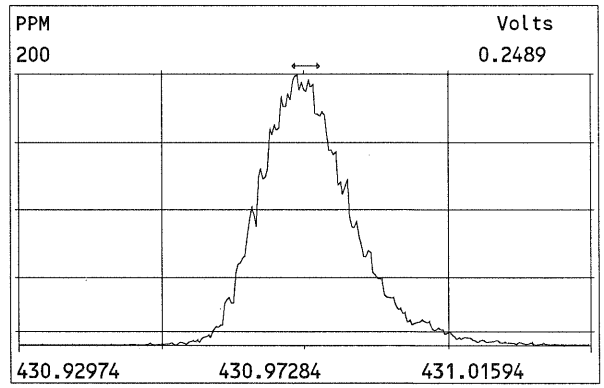


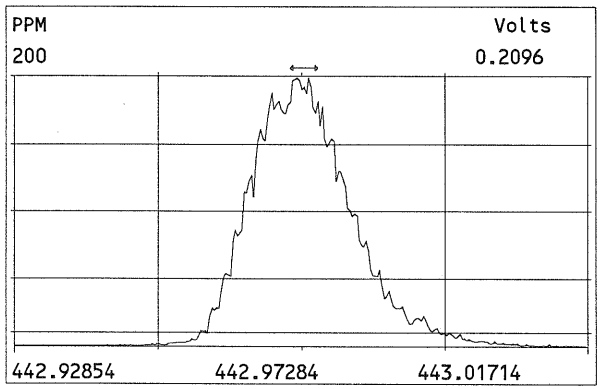
409

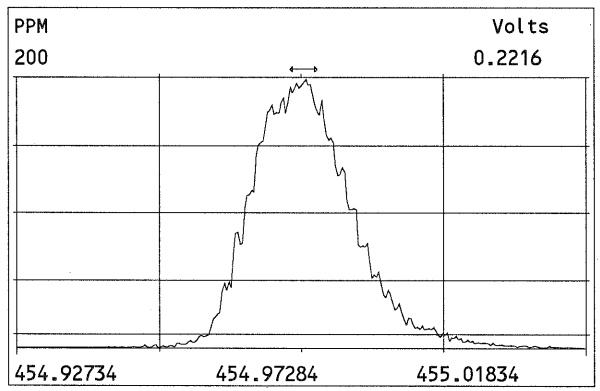
Peak Locate Examination:28-JUL-2006:03:17 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

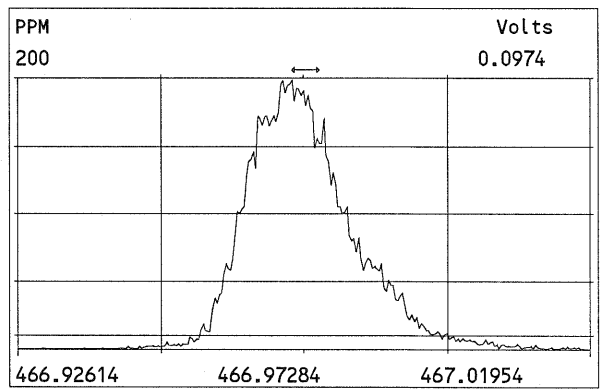


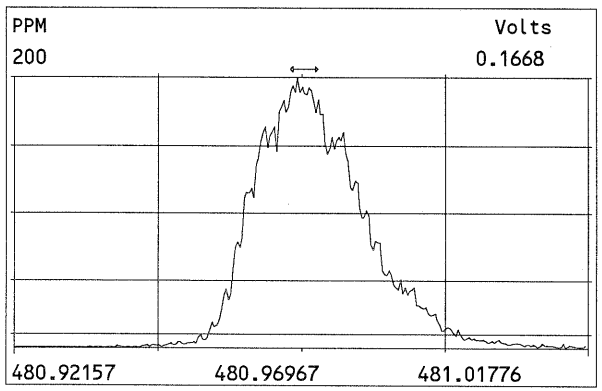




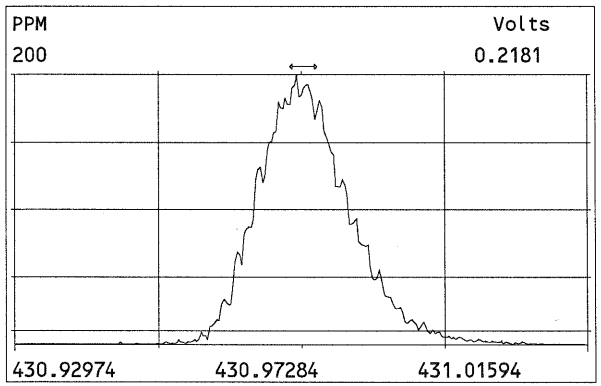


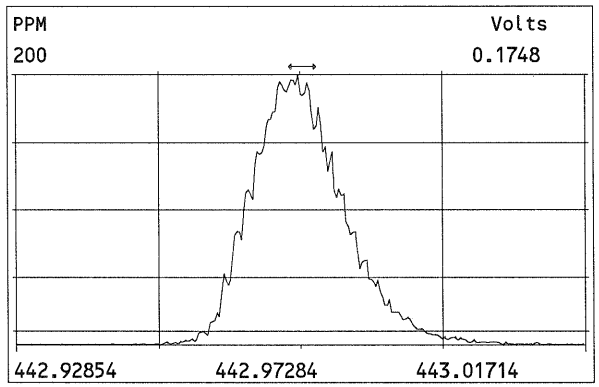


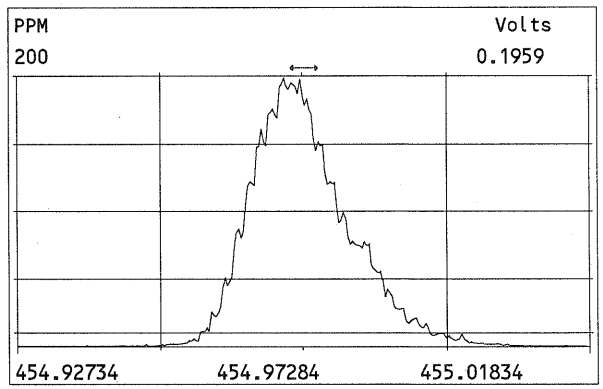


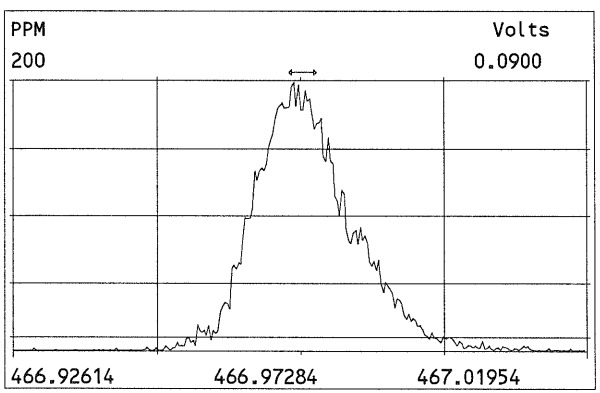


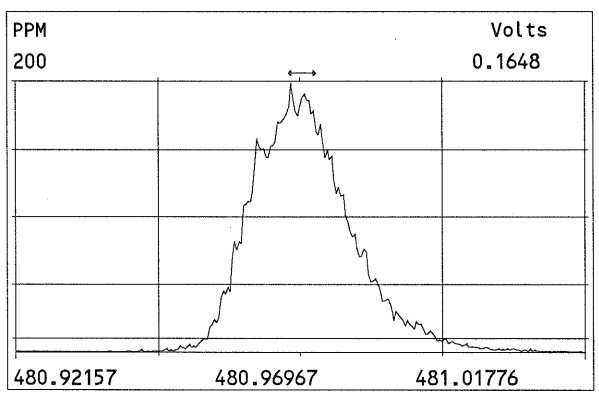
Peak Locate Examination:28-JUL-2006:03:19 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

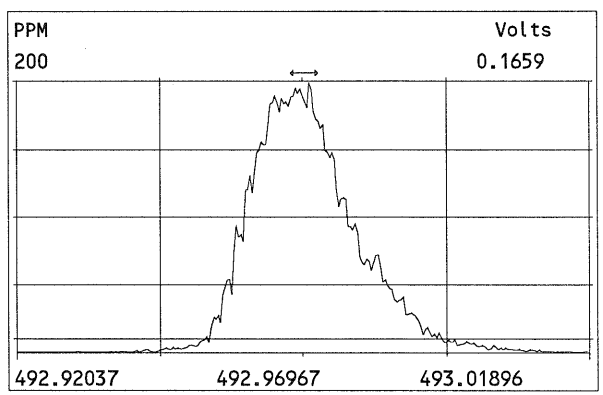


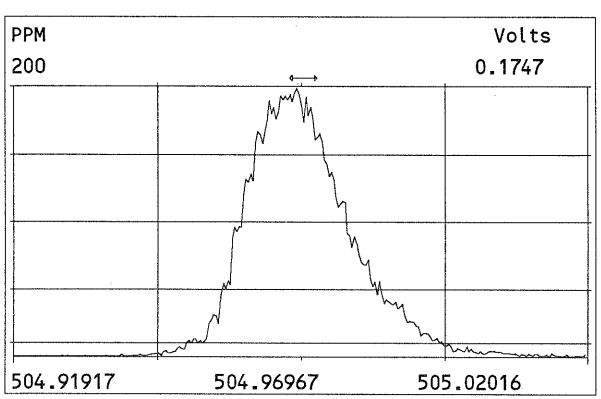


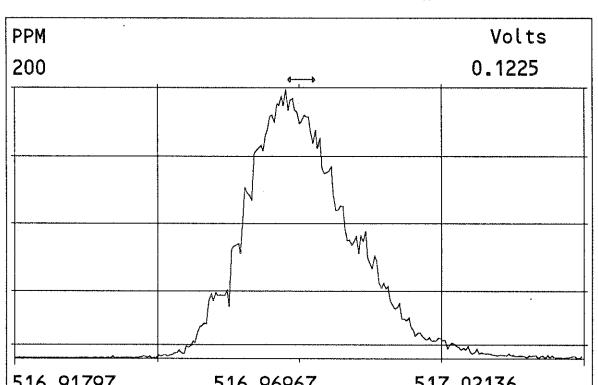












FRONTIER
ANALYTICAL LABORATORY

August 4, 2006

FAL Project ID: 3967

Mr. Mark Harris
Analytical Resources Incorporated
4611 South 134th Place
Tukwila, WA 98168-3240

Dear Mr. Harris,

Enclosed are the results for Frontier Analytical Laboratory project **3967**. This corresponds to your **Klamath River Sediment Study** project. The one sediment sample received on 7/14/2006 was extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and furans. Analytical Resources Incorporated requested a turnaround time of fifteen business days for project **3967**. The original Level I report was completed and reported on July 31, 2006. On August 2, 2006 we received an email request for a Level IV data package and Frontier Analytical Laboratory's standard electronic data deliverables (EDDs).

The following level IV report consists of an Analytical Data section, a Sample Receipt section, a Laboratory Raw Data section, and an Instrument Raw Data section. The Analytical Data section contains our project-sample tracking log and the analytical results. The Sample Receipt section contains your original chain of custody, our sample login form and a sample photo. The Laboratory Raw Data section contains our project request sheet, a percent solids sheet, an extraction bench sheet, and the cleanup bench sheet. The instrument raw data section contains three sub-sections; the sample results section, the initial calibration section and the continuing/ending calibration section. The sample results sub-section consists of the quantitation summary forms with chromatograms for all samples and QC. The initial calibration sub-section consists of the individual quantitation summary forms and chromatograms for each point of the initial calibration curve as well as an overall quantitation summary form of the initial calibration curve. The continuing/ending calibration sub-section consists of the quantitation summary forms and chromatograms for all beginning and ending calibration injections associated with the samples and QC. The EDD has been sent to you via email.

If you have any questions regarding project **3967**, please contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

FRONTIER ANALYTICAL LABORATORY
5172 Hillsdale Circle • El Dorado Hills, CA 95762
Tel (916) 934-0900 • Fax (916) 934-0999
www.frontieranalytical.com

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **3967**

Received on: **07/14/2006** Project Due: **08/07/2006** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time
3967-001-SA	0	Klamath River SS	C-4, S-1	EPA 1613 D/F	Sediment	07/07/2006	03:31 pm

FAL Sample ID	Notes
3967-001-SA	Run this sample with the other Klamath River sediment study sample received on 7/7/06 under FAL project 3956.

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 3967-001-MB
Client ID: Method Blank
Matrix: Sediment
Batch No: X0913

Date Extracted: 07-24-2006
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL3-7-5-06
GC Column: DB5
Units: pg/g

Acquired: 07-25-2006
WHO TEQ: 0.00

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.0616		-	0.0435				
1,2,3,7,8-PeCDD	ND	0.0630		-	0.0665				
1,2,3,4,7,8-HxCDD	ND	0.166		-	0.107				
1,2,3,6,7,8-HxCDD	ND	0.176		-	0.110	Total TCDD	ND	0.0616	
1,2,3,7,8,9-HxCDD	ND	0.200		-	0.126	Total PeCDD	ND	0.0630	
1,2,3,4,6,7,8-HpCDD	ND	0.0898		-	0.104	Total HxCDD	ND	0.200	
OCDD	ND	0.403		-	0.246	Total HpCDD	ND	0.0898	
2,3,7,8-TCDF	ND	0.0483		-	0.0467				
1,2,3,7,8-PeCDF	ND	0.0955		-	0.0794				
2,3,4,7,8-PeCDF	ND	0.0950		-	0.0748				
1,2,3,4,7,8-HxCDF	ND	0.0569		-	0.0719				
1,2,3,6,7,8-HxCDF	ND	0.0609		-	0.0771				
2,3,4,6,7,8-HxCDF	ND	0.0587		-	0.0746				
1,2,3,7,8,9-HxCDF	ND	0.0487		-	0.0863	Total TCDF	ND	0.0483	
1,2,3,4,6,7,8-HpCDF	ND	0.0652		-	0.0676	Total PeCDF	ND	0.0955	
1,2,3,4,7,8,9-HpCDF	ND	0.0680		-	0.0847	Total HxCDF	ND	0.0609	
OCDF	ND	0.238		-	0.249	Total HpCDF	ND	0.0682	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	94.4	25.0 - 164	
13C-1,2,3,7,8-PeCDD	85.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	92.8	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	87.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	103	23.0 - 140	
13C-OCDD	108	17.0 - 157	
13C-2,3,7,8-TCDF	99.7	24.0 - 169	
13C-1,2,3,7,8-PeCDF	86.3	24.0 - 185	
13C-2,3,4,7,8-PeCDF	84.0	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	84.3	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	83.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	86.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	94.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	90.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	119	26.0 - 138	
13C-OCDF	109	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	96.1	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: [illegible]
Date: 7/31/06

Reviewed By: DPJ
Date: 7/31/06

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 3967-001-OPR
Client ID: OPR
Matrix: Sediment
Batch No: X0913

Date Extracted: 07-24-2006
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL3-7-5-06
GC Column: DB5
Units: ng/ml

Acquired: 07-25-2006
WHO TEQ: NA

Compound	Conc	QC Limits
2,3,7,8-TCDD	8.19	6.70 - 15.8
1,2,3,7,8-PeCDD	45.7	35.0 - 71.0
1,2,3,4,7,8-HxCDD	48.0	35.0 - 82.0
1,2,3,6,7,8-HxCDD	47.8	38.0 - 67.0
1,2,3,7,8,9-HxCDD	48.4	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	47.9	35.0 - 70.0
OCDD	93.0	78.0 - 144
2,3,7,8-TCDF	8.52	7.50 - 15.8
1,2,3,7,8-PeCDF	48.4	40.0 - 67.0
2,3,4,7,8-PeCDF	48.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	49.7	36.0 - 67.0
1,2,3,6,7,8-HxCDF	49.3	42.0 - 65.0
2,3,4,6,7,8-HxCDF	48.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	48.8	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	49.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	48.9	39.0 - 69.0
OCDF	97.6	63.0 - 170

Internal Standards	% Rec	QC Limits
13C-2,3,7,8-TCDD	102	20.0 - 175
13C-1,2,3,7,8-PeCDD	89.4	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	93.7	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	94.2	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	111	26.0 - 166
13C-OCDD	110	13.0 - 198
13C-2,3,7,8-TCDF	103	22.0 - 152
13C-1,2,3,7,8-PeCDF	90.5	21.0 - 192
13C-2,3,4,7,8-PeCDF	88.7	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	88.8	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	89.9	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	91.2	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	101	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	122	20.0 - 186
13C-OCDF	111	13.0 - 198

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	96.8	31.0 - 191

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: TC
Date: 7/31/06

Reviewed By: DN
Date: 7/31/06

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 3967-001-SA
Client ID: C-4, S-1 (1:10 DIL)
Matrix: Sediment
Batch No: X0913

Date Extracted: 07-24-2006
Date Received: 07-14-2006
Amount: 10.03 g
% Solids: 25.30

ICal: PCDDFAL3-7-5-06
GC Column: DB5
Units: pg/g

Acquired: 07-26-2006
WHO TEQ: 3.38

Compound	Conc	DL	Qual	WHO Tox	MDL	Compound	Conc	DL	Qual
2,3,7,8-TCDD	ND	0.205		-	0.0435				
1,2,3,7,8-PeCDD	ND	1.96		-	0.0665				
1,2,3,4,7,8-HxCDD	ND	1.62		-	0.107				
1,2,3,6,7,8-HxCDD	4.98	-		0.498	0.110	Total TCDD	2.12	-	
1,2,3,7,8,9-HxCDD	3.15	-		0.315	0.126	Total PeCDD	2.47	-	J
1,2,3,4,6,7,8-HpCDD	83.6	-		0.836	0.104	Total HxCDD	43.6	-	
OCDD	737	-		0.0737	0.246	Total HpCDD	181	-	
2,3,7,8-TCDF	0.631	-		0.0631	0.0467				
1,2,3,7,8-PeCDF	ND	0.823		-	0.0794				
2,3,4,7,8-PeCDF	1.12	-	J	0.560	0.0748				
1,2,3,4,7,8-HxCDF	1.45	-	J	0.145	0.0719				
1,2,3,6,7,8-HxCDF	2.76	-		0.276	0.0771				
2,3,4,6,7,8-HxCDF	2.10	-	J	0.210	0.0746				
1,2,3,7,8,9-HxCDF	ND	0.403		-	0.0863	Total TCDF	9.17	-	
1,2,3,4,6,7,8-HpCDF	38.0	-		0.380	0.0676	Total PeCDF	13.0	-	
1,2,3,4,7,8,9-HpCDF	1.60	-	J	0.0160	0.0847	Total HxCDF	38.9	-	
OCDF	81.7	-		0.00817	0.249	Total HpCDF	102	-	

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	96.9	25.0 - 164	
13C-1,2,3,7,8-PeCDD	79.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	100	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	102	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	95.4	23.0 - 140	
13C-OCDD	96.4	17.0 - 157	
13C-2,3,7,8-TCDF	96.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	76.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	84.6	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	98.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	95.8	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	95.6	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	97.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	89.5	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	101	26.0 - 138	
13C-OCDF	90.8	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	92.1	35.0 - 197

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J	Analyte concentration is below calibration range
M	Maximum possible concentration
ND	Analyte Not Detected
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection

Analyst: [signature]
Date: 7/31/06

Reviewed By: [signature]
Date: 7/31/06

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SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 07/11/06

ANALYTICAL RESOURCES INCORPORATED

3967/10

ARI Project: JP12

Laboratory: Frontier Analytical Laboratory
Lab Contact: DALE VICKERS
Lab Address: 5172 Hillsdale Circle
El Dorado Hills, CA 95762
Phone: 916-934-0900
Fax: 916-934-0999

ARI Client: G & G Associates
Project ID: Klamath River Sediment Study
ARI PM: Mark Harris
Phone: 206-695-6210
Fax: 206-695-6201

Analytical Protocol: PSDDA
Special Instructions:

Requested Turn Around: **07/25/06**
Fax Results (Y/N): **Yes**

Limits of Liability. *Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry. The total liability of ARI, its officers, agents, employees, or sucessors, arising out of or in connection with the requested services, shall not exceed the negotiated amount for said services. The agreement by the Subcontractor to perform services requested by ARI releases ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Subcontractor.*

ARI ID	Client ID/ Add'l ID	Sampled	Matrix	Bottles	Analyses
06-12110-JP12D	C-4,S-1	07/07/06 15:31	Sediment		DIOXINS

Special Instructions: None

mark to Kathy; use "client ID" for Sampe ID

KZ 7/18/06

Carrier	Airbill	Date
UPS	1Z 832 695 13 4238	7/13/06

Relinquished by	Company	Date	Time
[signature]	ARI	7/13/06	1600
Received by	**Company**	**Date**	**Time**
[signature]	FAL	7/14/06	1115

Subcontractor Custody Form - **JP12**
Page 1 of 1

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **3967**

Client:	Analytical Resources Incorporated
Client Project ID:	Klamath River SS
Date Received:	07/14/2006
Time Received:	11:15 am
Received By:	NM
Logged In By:	KZ
# of Samples Received:	1
Duplicates:	0
Storage Location:	R1

Method of Delivery:	UPS
Tracking Number:	1z8326951342388734
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	1
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	07/07/2007
Adequate Sample Volume	Yes
Anomalies or additional comments:	

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SUBCONTRACTOR ANALYSIS REQUEST
CUSTODY TRANSFER 07/11/06

ANALYTICAL RESOURCES INCORPORATED

3967/1

ARI Project: JP12

Laboratory: Frontier Analytical Laboratory
Lab Contact: DALE VICKERS
Lab Address: 5172 Hillsdale Circle
El Dorado Hills, CA 95762
Phone: 916-934-0900
Fax: 916-934-0999

ARI Client: G & G Associates
Project ID: Klamath River Sediment Study
ARI PM: Mark Harris
Phone: 206-695-6210
Fax: 206-695-6201

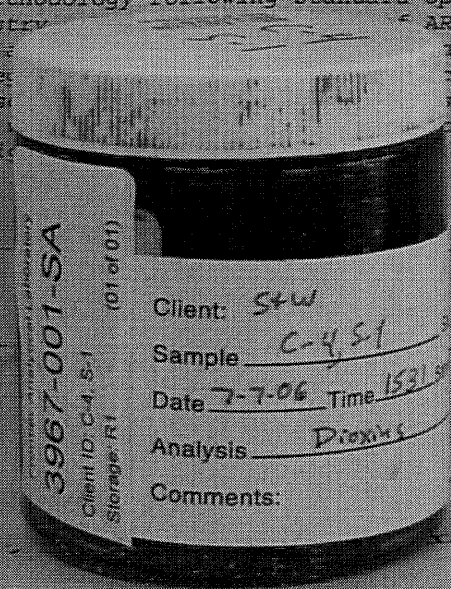
Analytical Protocol: PSDDA
Special Instructions:

Requested Turn Around: **07/25/06**
Fax Results (Y/N): **Yes**

Limits of Liability. Subcontractor is expected to perform all requested services in accordance with appropriate methodology following Standard Operating Procedures that meet standards for the industry [illegible] ARI, its officers, agents, employees, or sucessors, [illegible] with the requested services, shall not exceed the ne[illegible]es. The agreement by the Subcontractor to perform s[illegible]es ARI from any liability in excess thereof, not [illegible]he contrary in any contract, purchase order or co-si[illegible] the Subcontractor.

ARI ID	Client ID/ Add'l ID	[illegible]es	Analyses
06-12110-JP12D	C-4,S-1		DIOXINS

Special Instructions: None



2006/07/13

PROJECT REQUEST SHEET

Project #:	3967	Sample #:	1	Client Manager:	BS
Client:	Analytical Resources	Storage:	R1	Hold Time:	07/09/2007
Matrix:	Sediment	Extraction Batch:	0913	Due Date:	08/07/2006
Method:	EPA 1613 D/F				

COMMENTS/INSTRUCTIONS:

MB & OPR from 3956-1

Results: 3967
3967RI = D,1

Extract/s located in box: "HOTTER THAN HELL!"

Standards: 3969-2x

Instrument:

DB5	FAL-3
DB225	
DB1	
Other	

Percent Solids

FAL Project: 3967

Sample ID	Chemist	Date	Wet Sample Weight (g)	Dry Sample Weight (g)	% Solids ✓	10g Equiv
3967-001-0001-SA	GN	7/19/06	8.27	2.09	25.27	39.57

% Solids Summary:

Non-Filtered Determination

1. Place an aliquot of sample into a pre-weighed aluminum weighing boat. Use approximately two to ten grams for solid samples, approximately 10 mL for aqueous samples.
2. Record the weight.
3. Dry sample overnight at approximately 110 C.

Filtered Determination

1. Pre-weigh a glass fiber filter of appropriate pore size and pressure filter a sample aliquot (200-1000mL) through it.
2. Air dry the filter and record the dry weight.

% Solids calculation

% solids = aliquot after drying/aliquot before drying x 100

- Samples containing one percent solids or less are prepared as aqueous samples.
- Samples containing greater than one percent solids prepared as solid samples.

EXTRACTION SHEET

Project #: 3967 Extraction Date: 2006-07-24 Extraction Chemist: NM

Method/Analysis: EPA 1613 D/F

Procedure: SOX/SDS Solvent: Toluene

Sample ID	Wet wt. (g/L)	Dry wt. (g/L)	IS Amt: 10.0uL ID: 051212A Vial: 4 Chemist/Witness/Date	NS Amt: 10.0uL ID: 051212B Vial: 2 Chemist/Witness/Date	CSS Amt: 10.0uL ID: 051212C Vial: 3 Chemist/Witness/Date
0913-001-0001-MB	FROM	3956	-1	N/A	
0913-001-0001-OPR				↓	
3967-001-0001-SA	39.66	10.02	DAN / 7/24/06		GAN 7/25/06

Comments:

CLEANUP SHEET

Project #: 3967

Method/Analysis: EPA 1613 D/F

Splits: 0 Split Date: N/A Final Volume: 20.0uL

Sample ID	Cleanup 1 MSG / ACID ALUMINA Chemist/Date	Cleanup 2 charcoal Chemist/Date	Cleanup 3 N/A Chemist/Date	RS Amt: 10.0uL ID: 051212 Vial: 3 Chemist/Witness/Date
0913-001-0001-MB	From 3956-1			
0913-001-0001-OPR				
3967-001-0001-SA	GN 7/25/06	/7/25/06	N/A	(DN) /7/25/06

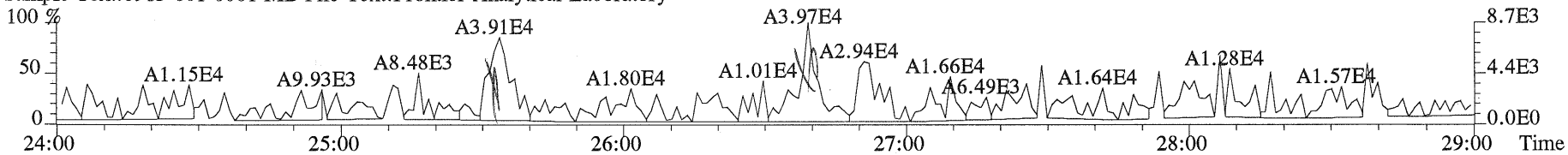
Comments:

FAL ID: 0913-001-0001-MB Filename: 25JUL06M Sam:6 Acquired: 25-JUL-06 19:25:45 ICal: PCDDFAL3-7-5-06
Client ID: Method Blank ConCal: ST072506M1 EndCal: ST072506M2
Results: 0913 GC Column: DB5 Amount: 10.00 NATO 1989 Tox: 0.00
WHO 1998 Tox: 0.00

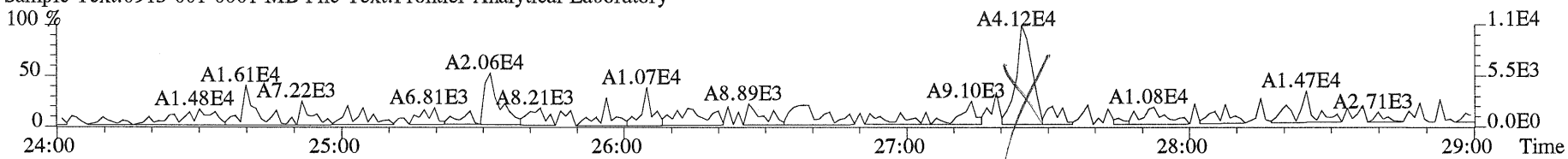
Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	*	*	n	NotFnd	1.10	*		2.50	3530	0.0616	
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.90	*		2.50	1630	0.0630	
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	0.96	*		2.50	3580	0.166	
1,2,3,6,7,8-HxCDD	*	*	n	NotFnd	0.83	*		2.50	3580	0.176	
1,2,3,7,8,9-HxCDD	*	*	n	NotFnd	0.77	*		2.50	3580	0.200	
1,2,3,4,6,7,8-HpCDD	*	*	n	NotFnd	0.86	*		2.50	2130	0.0898	
OCDD	*	*	n	NotFnd	0.87	*		2.50	6700	0.403	
2,3,7,8-TCDF	*	*	n	NotFnd	0.99	*		2.50	3830	0.0483	
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.80	*		2.50	3300	0.0955	
2,3,4,7,8-PeCDF	*	*	n	NotFnd	0.88	*		2.50	3300	0.0950	
1,2,3,4,7,8-HxCDF	*	*	n	NotFnd	1.42	*		2.50	2320	0.0569	
1,2,3,6,7,8-HxCDF	*	*	n	NotFnd	0.97	*		2.50	2320	0.0609	
2,3,4,6,7,8-HxCDF	*	*	n	NotFnd	1.26	*		2.50	2320	0.0587	
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.34	*		2.50	2320	0.0487	
1,2,3,4,6,7,8-HpCDF	*	*	n	NotFnd	1.28	*		2.50	2650	0.0652	
1,2,3,4,7,8,9-HpCDF	*	*	n	NotFnd	1.22	*		2.50	2650	0.0680	
OCDF	*	*	n	NotFnd	0.90	*		2.50	4860	0.238	
											Rec
13C-2,3,7,8-TCDD	1.91e+08	0.77	y	27:23	1.00	189					94.4
13C-1,2,3,7,8-PeCDD	1.67e+08	1.57	y	33:11	0.96	172					85.8
13C-1,2,3,4,7,8-HxCDD	1.26e+08	1.28	y	38:32	0.90	186					92.8
13C-1,2,3,6,7,8-HxCDD	1.42e+08	1.28	y	38:42	1.09	174					87.2
13C-1,2,3,4,6,7,8-HpCDD	1.48e+08	1.05	y	44:07	0.96	206					103
13C-OCDD	2.32e+08	0.90	y	49:39	0.71	433					108
13C-2,3,7,8-TCDF	2.73e+08	0.79	y	26:38	0.94	199					99.7
13C-1,2,3,7,8-PeCDF	2.53e+08	1.59	y	31:28	1.00	173					86.3
13C-2,3,4,7,8-PeCDF	2.32e+08	1.59	y	32:47	0.94	168					84.0
13C-1,2,3,4,7,8-HxCDF	1.09e+08	0.52	y	37:09	0.86	169					84.3
13C-1,2,3,6,7,8-HxCDF	1.54e+08	0.52	y	37:21	1.23	167					83.3
13C-2,3,4,6,7,8-HxCDF	1.15e+08	0.52	y	38:18	0.88	173					86.5
13C-1,2,3,7,8,9-HxCDF	1.40e+08	0.51	y	39:43	0.98	189					94.6
13C-1,2,3,4,6,7,8-HpCDF	1.18e+08	0.45	y	42:13	0.86	182					90.9
13C-1,2,3,4,7,8,9-HpCDF	1.25e+08	0.44	y	45:01	0.70	238					119
13C-OCDF	2.69e+08	0.90	y	50:01	0.82	437					109
37Cl-2,3,7,8-TCDD	6.32e+07			27:25	0.81	76.9					96.1
13C-1,2,3,4-TCDD	2.03e+08	0.79	y	26:49	-	10.6					
13C-1,2,3,4-TCDF	2.93e+08	0.77	y	25:34	-	10.2					
13C-1,2,3,7,8,9-HxCDD	1.50e+08	1.26	y	39:09	-	10.1					
								Fac	Noise	DL	#Hom
Total Tetra-Dioxins	*			NotFnd	1.10	*		2.50	3530	0.0616	0
Total Penta-Dioxins	*			NotFnd	0.90	*		2.50	1630	0.0630	0
Total Hexa-Dioxins	*			NotFnd	0.85	*		2.50	3580	0.200	0
Total Hepta-Dioxins	*			NotFnd	0.86	*		2.50	2130	0.0898	0
Total Tetra-Furans	*			NotFnd	0.99	*		2.50	3830	0.0483	0
1st Fn. Tot Penta-Furans	*			NotFnd	0.84	*		2.50	3300	0.0955	0 PeCDF
Total Penta-Furans	*			NotFnd	0.84	*		2.50	3300	0.0955	0 *
Total Hexa-Furans	*			NotFnd	1.22	*		2.50	2320	0.0609	0
Total Hepta-Furans	*			NotFnd	1.25	*		2.50	2650	0.0682	0

Analyst: K Date: 7/26/06

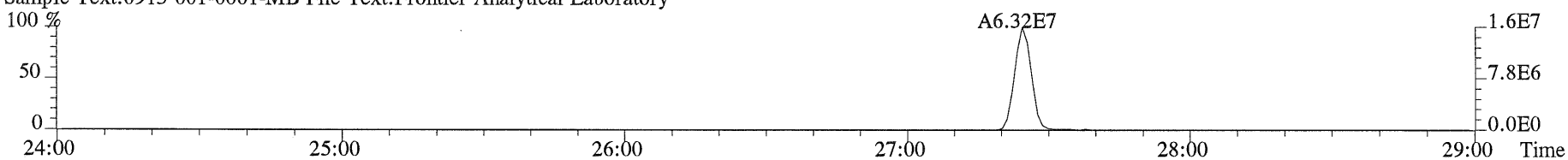
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



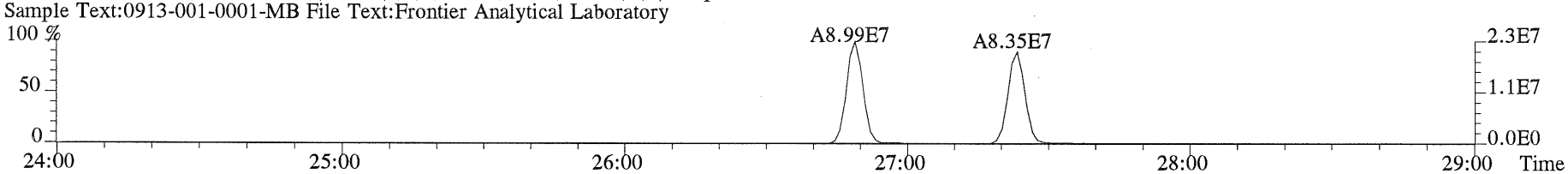
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



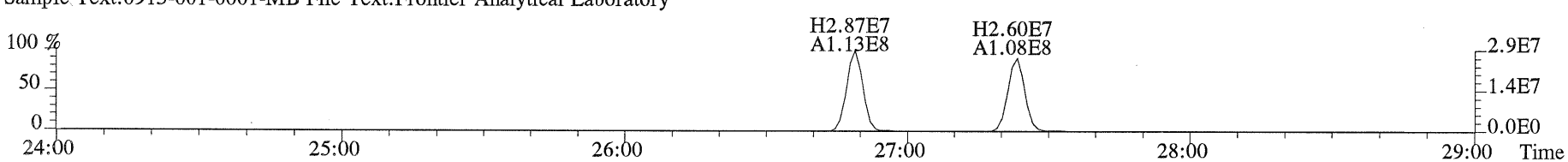
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



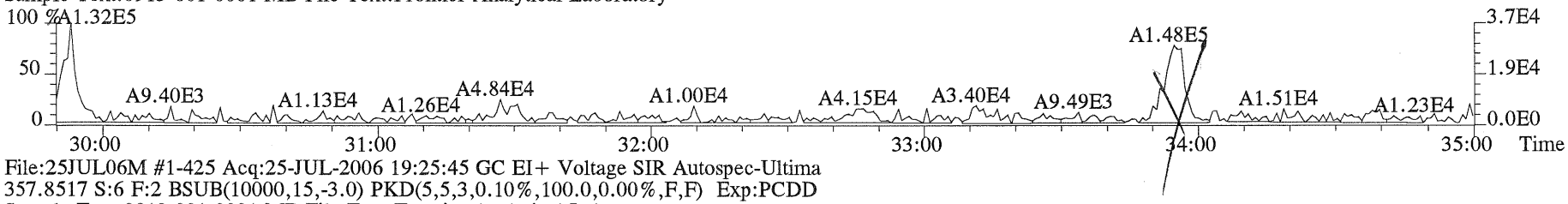
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



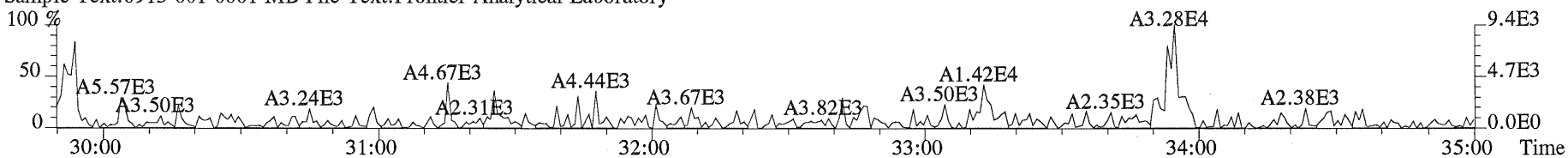
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



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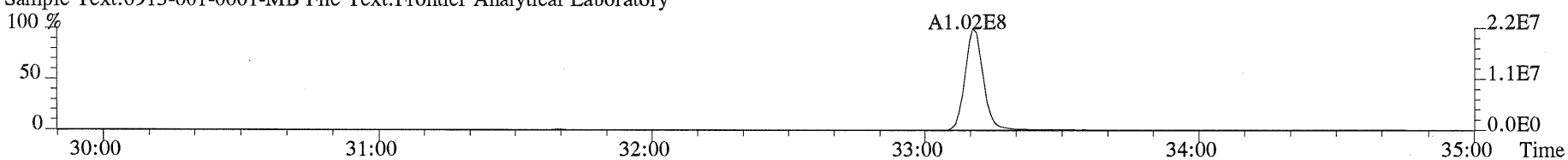
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



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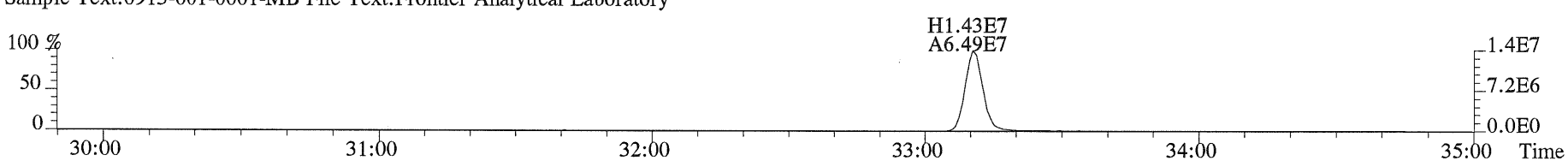
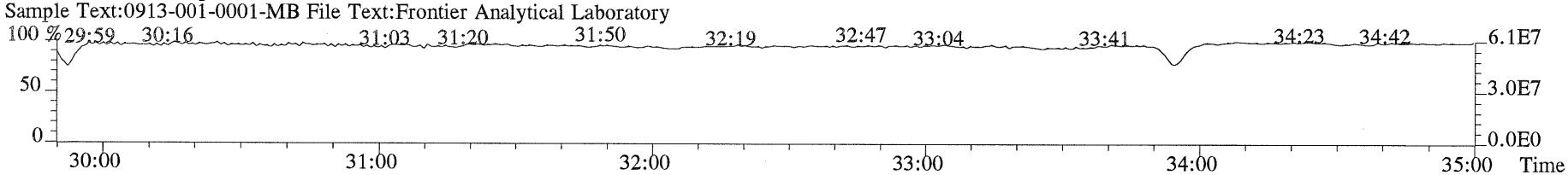
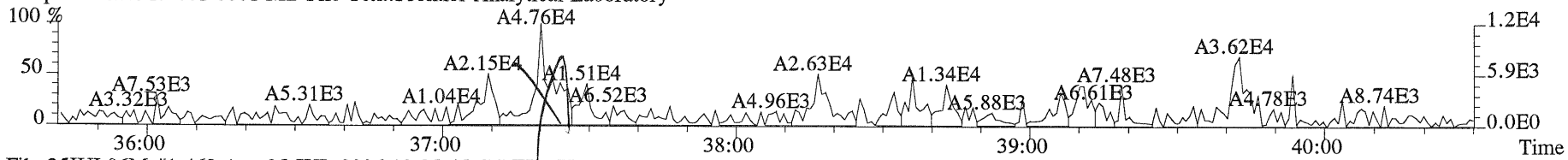
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



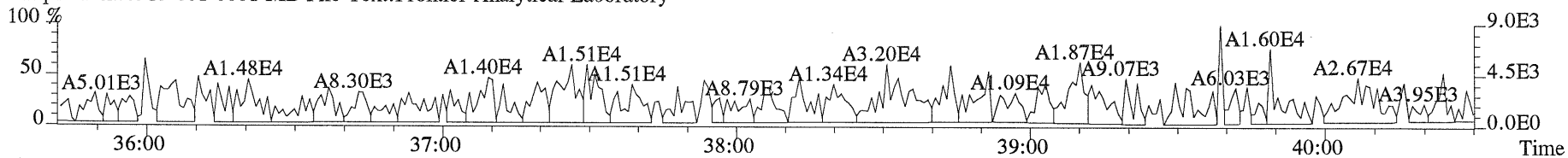
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



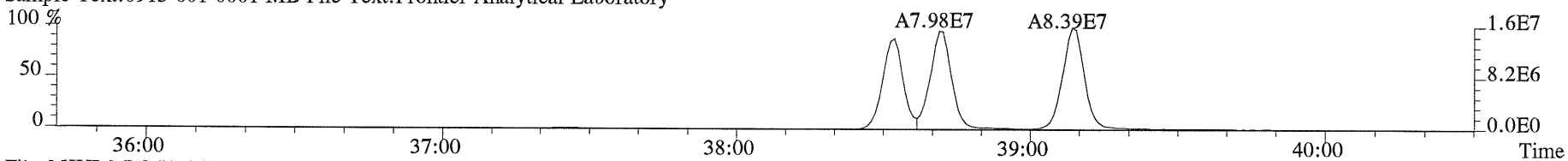
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



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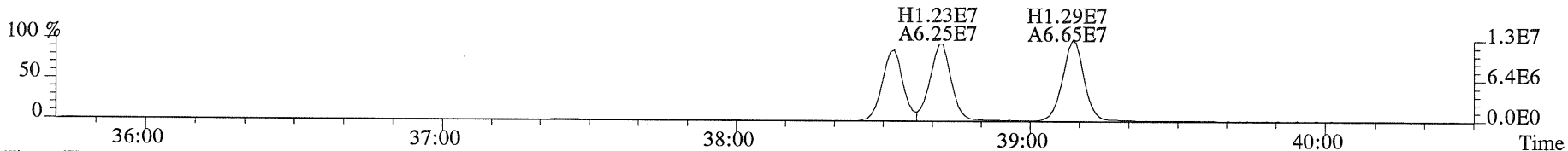
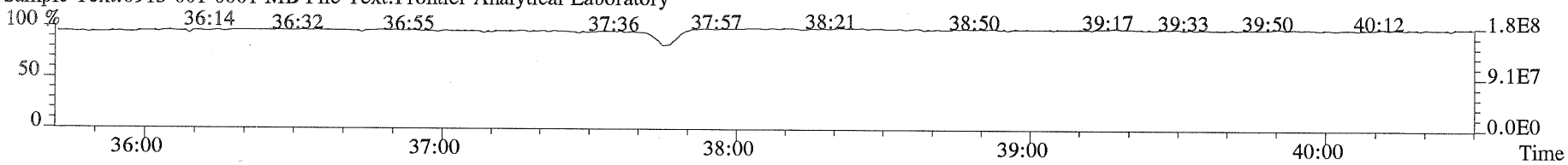
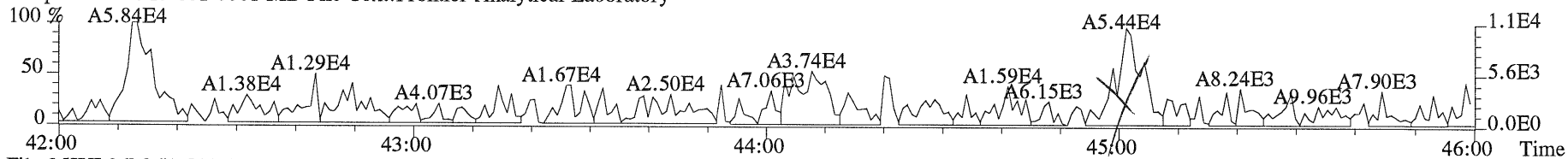
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



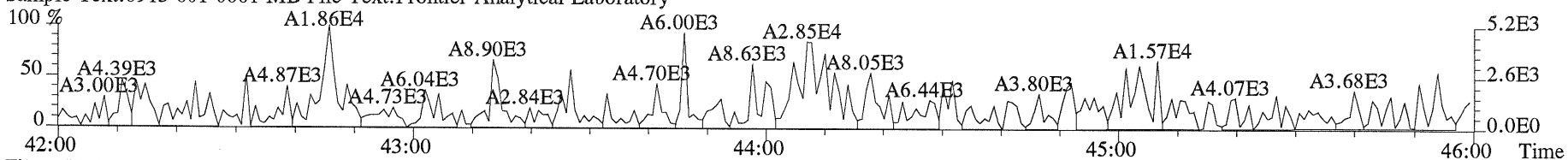
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



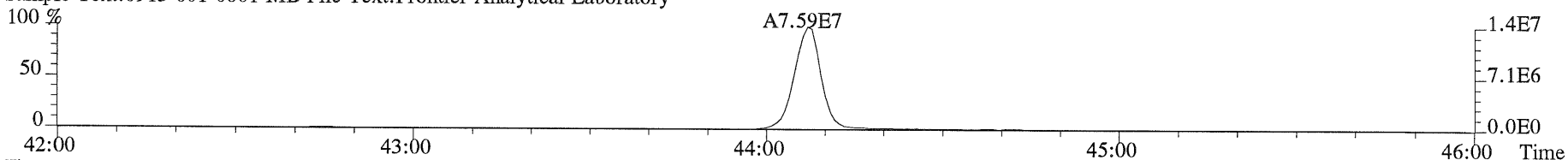
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



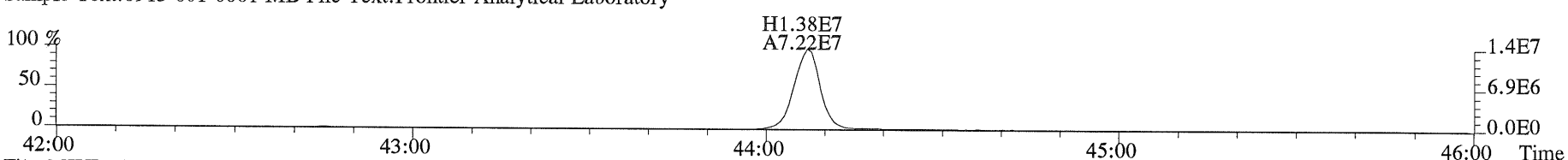
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



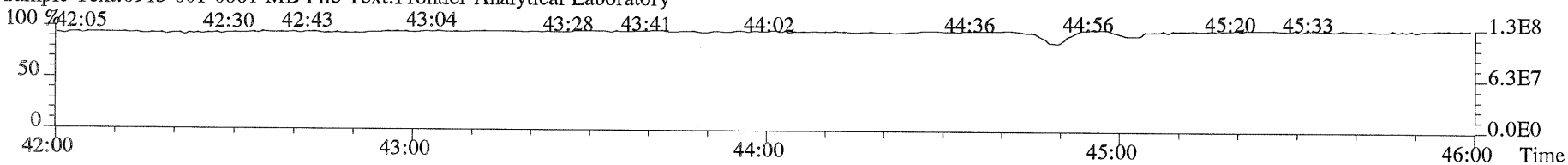
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



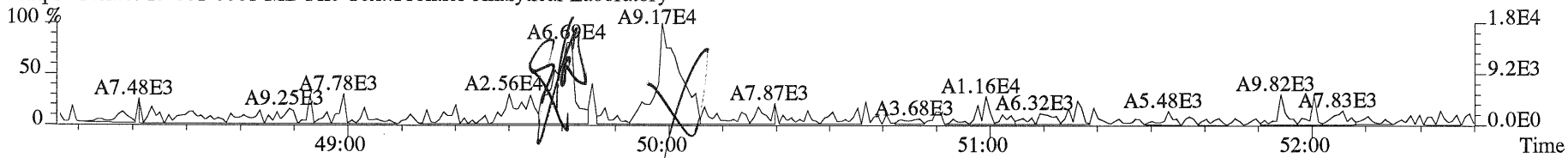
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



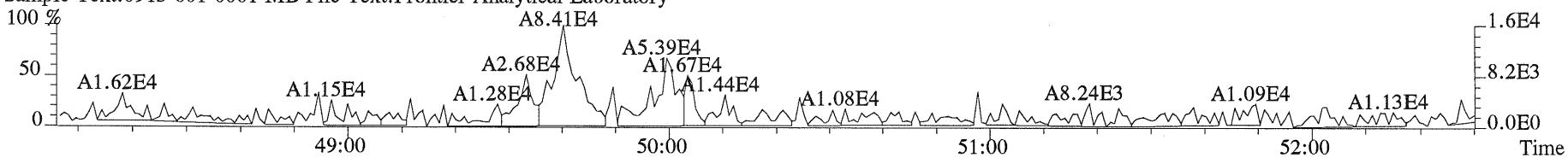
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



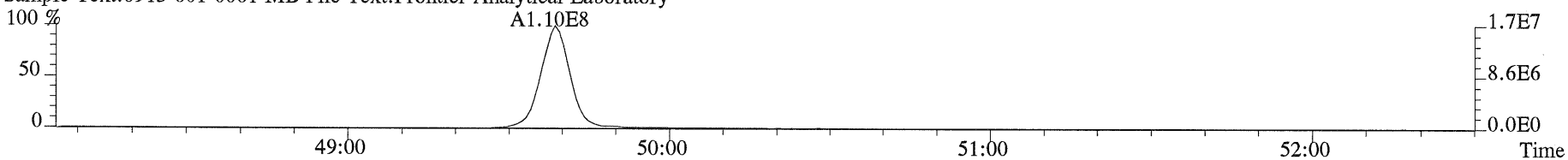
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



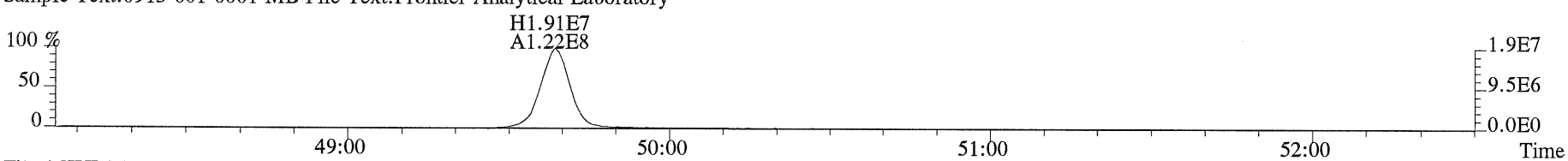
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



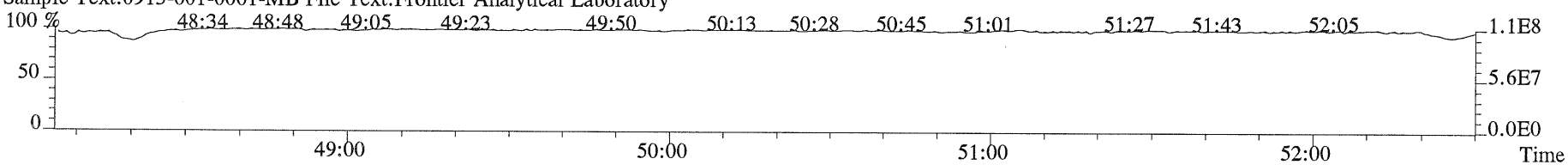
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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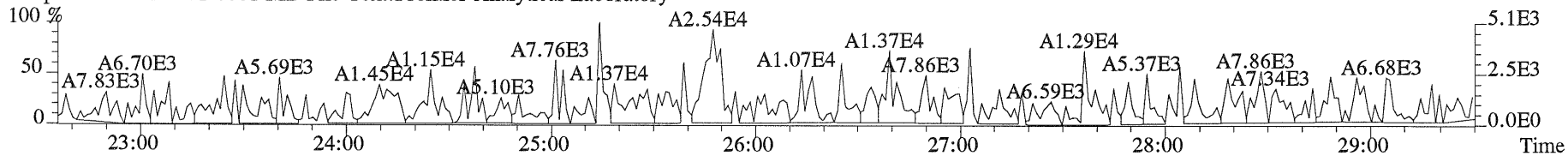
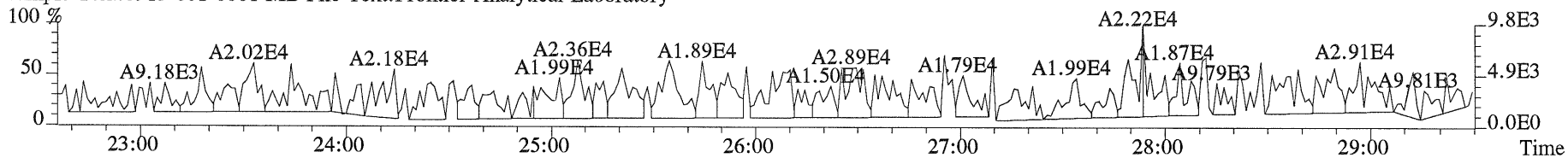
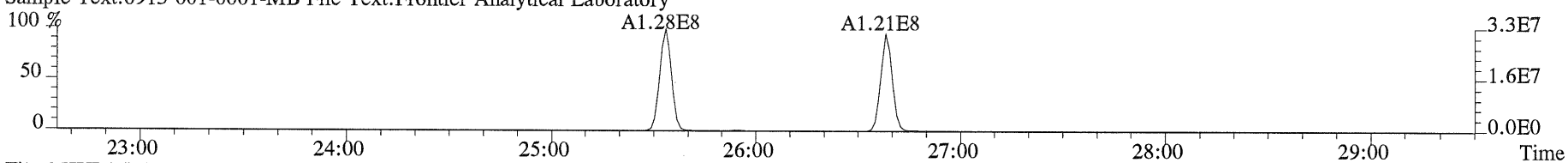


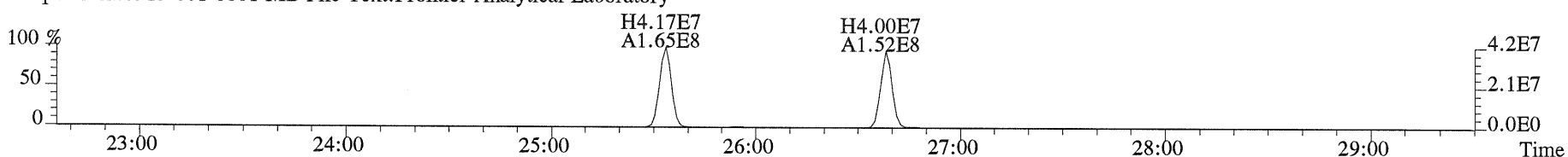
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



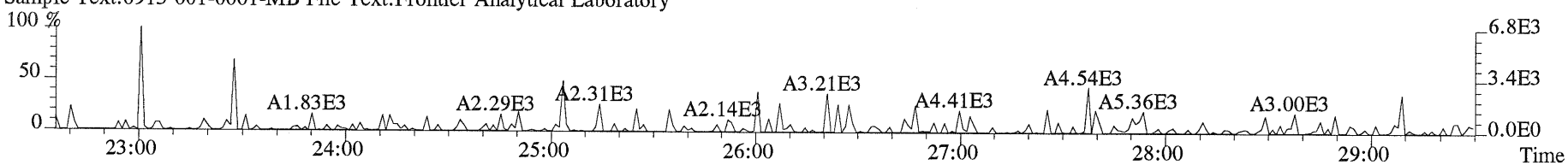
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



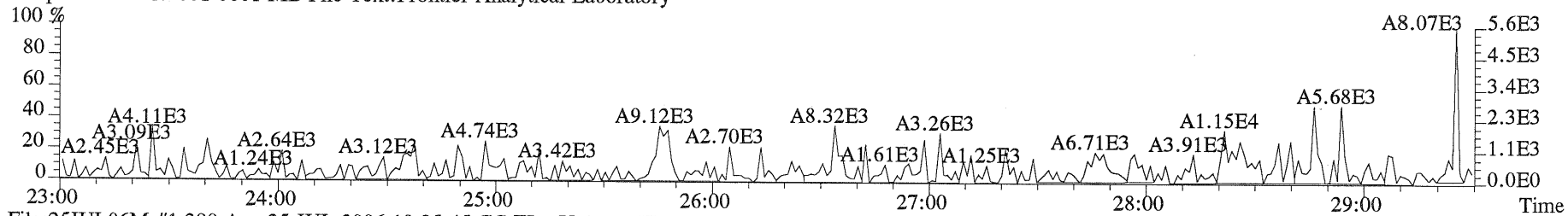
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



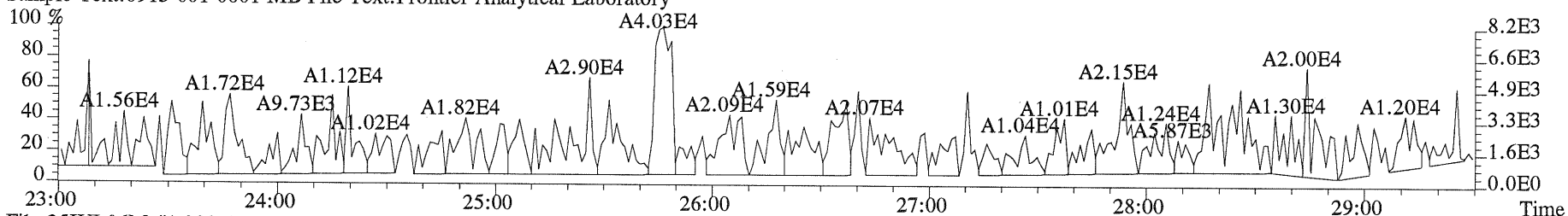
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



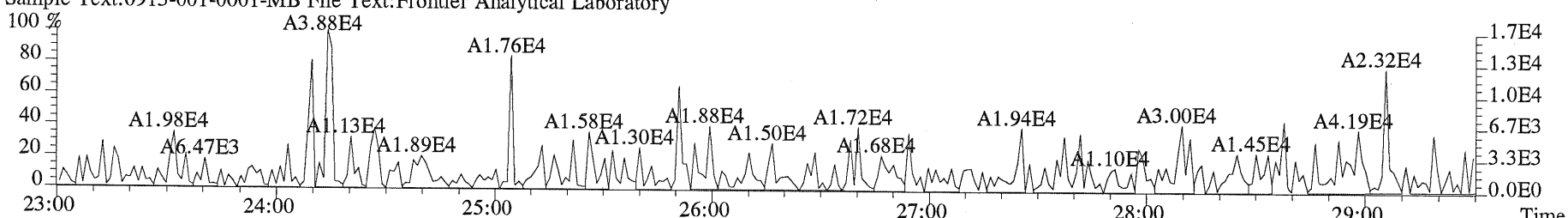
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



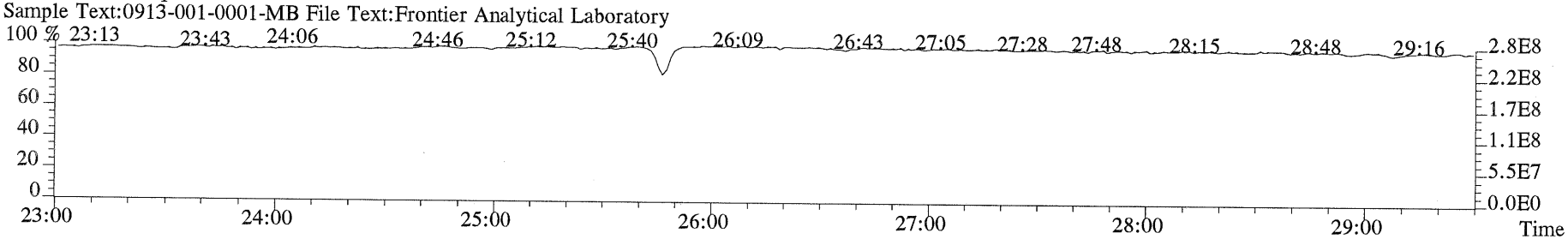
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



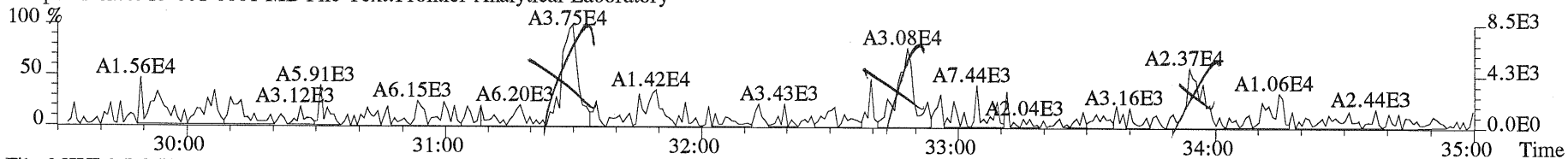
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



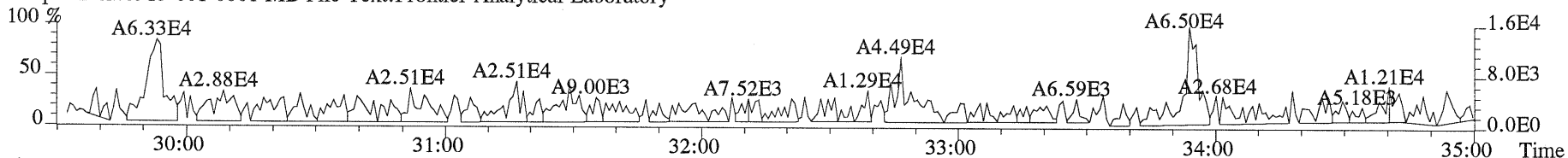
File:25JUL06M #1-390 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



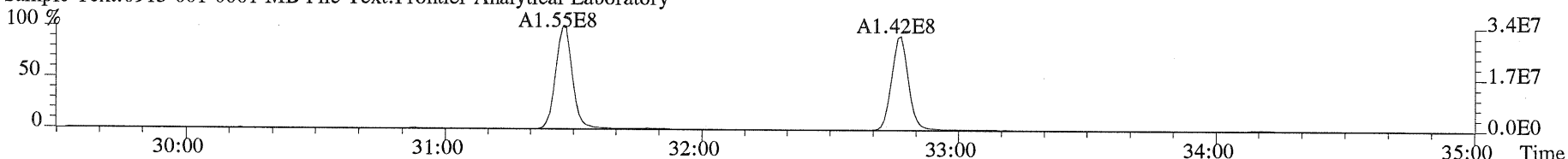
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



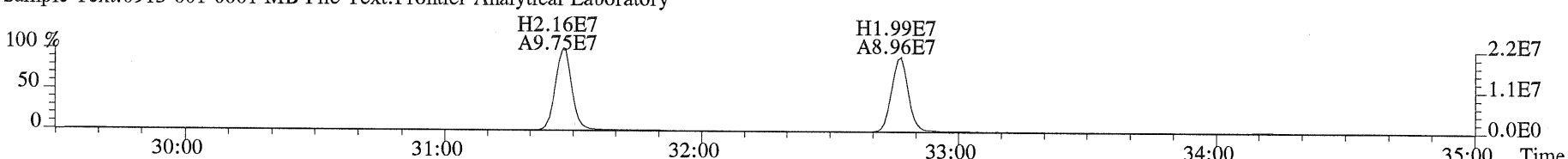
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



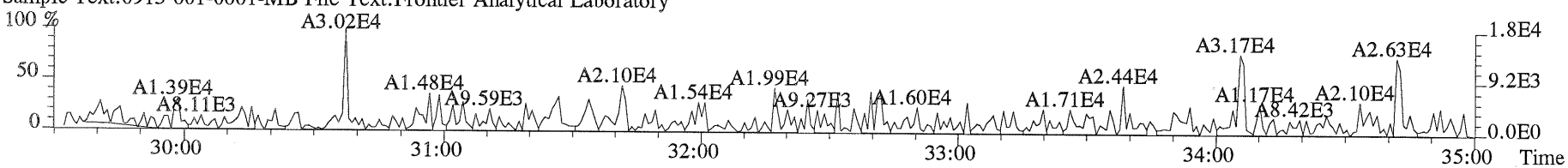
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



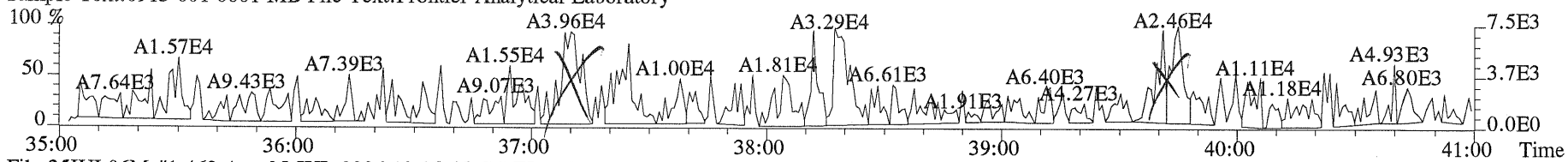
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



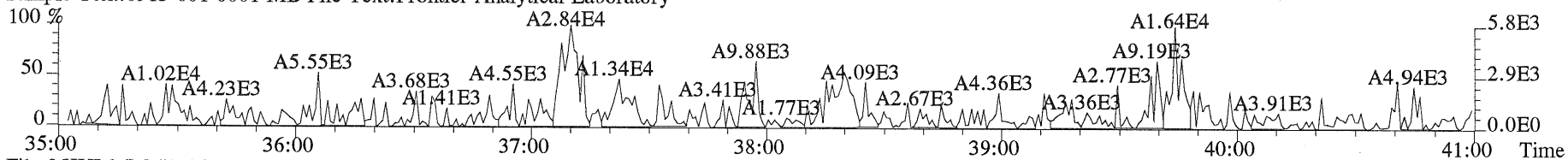
File:25JUL06M #1-425 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



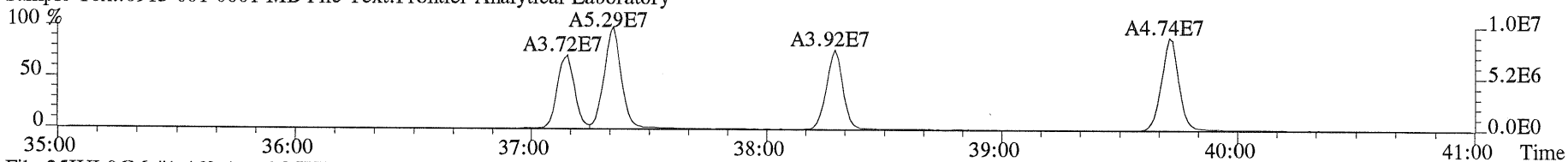
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



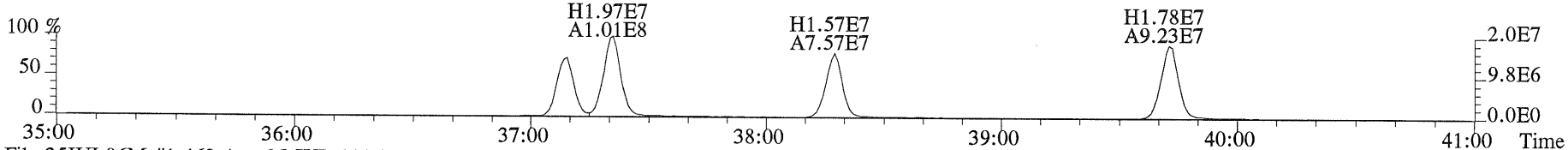
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



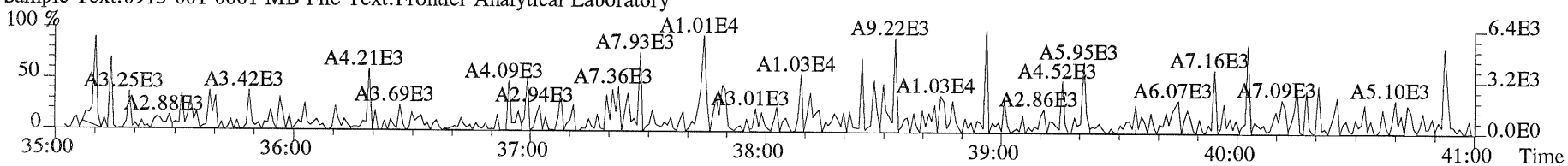
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



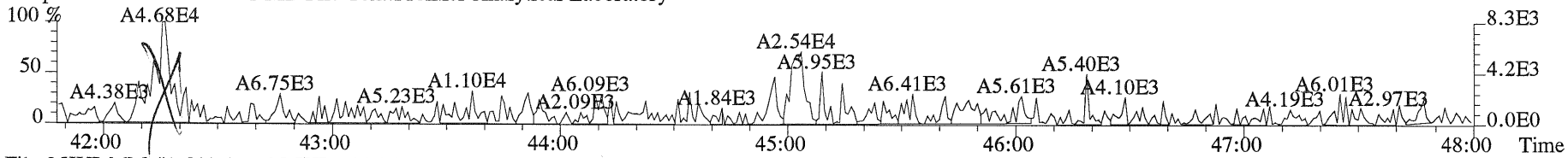
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



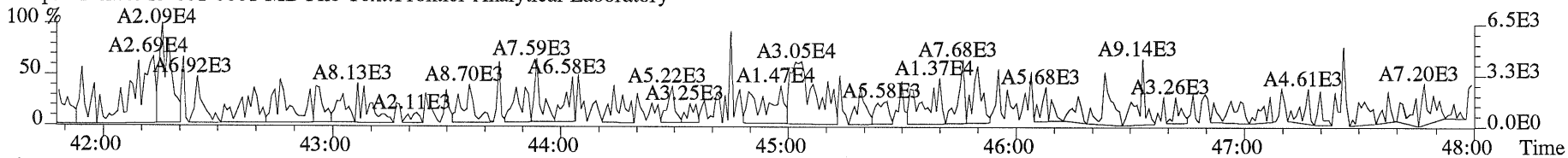
File:25JUL06M #1-463 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



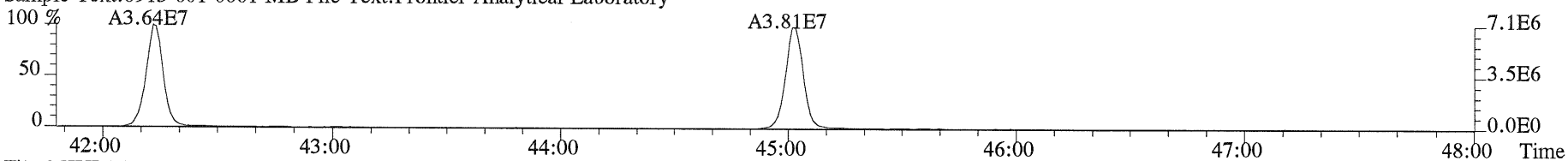
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



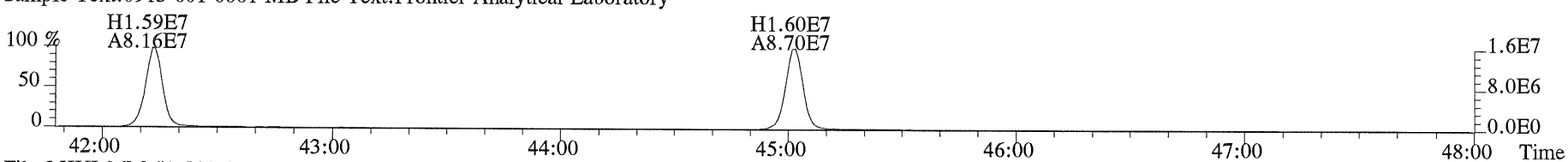
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



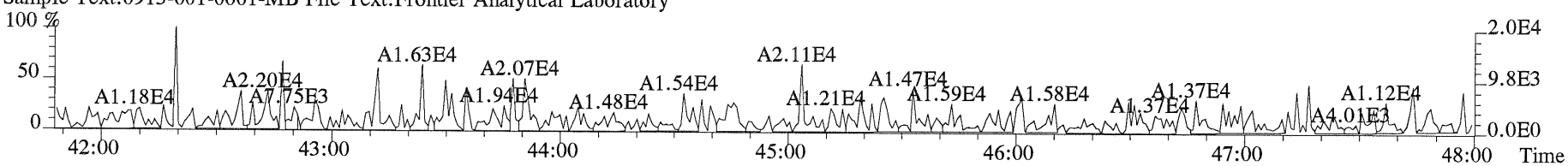
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



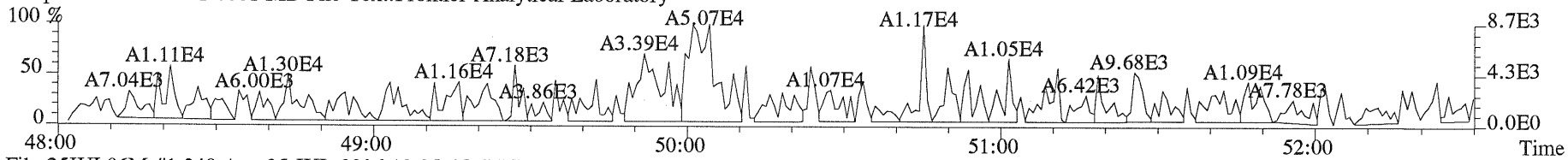
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



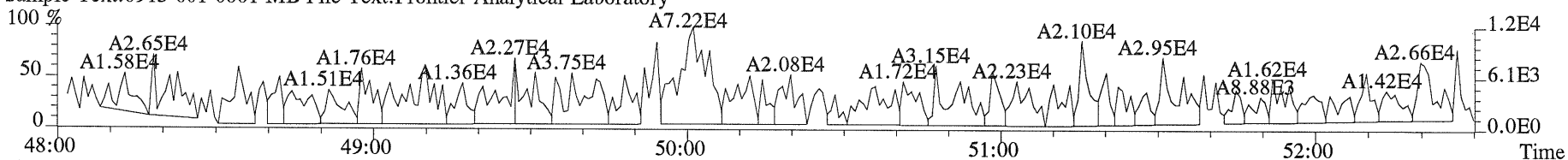
File:25JUL06M #1-541 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



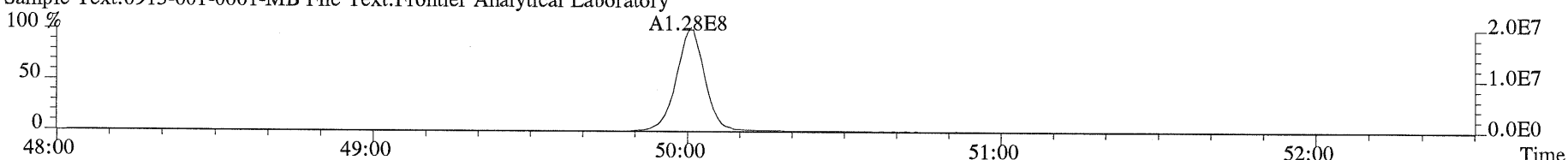
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



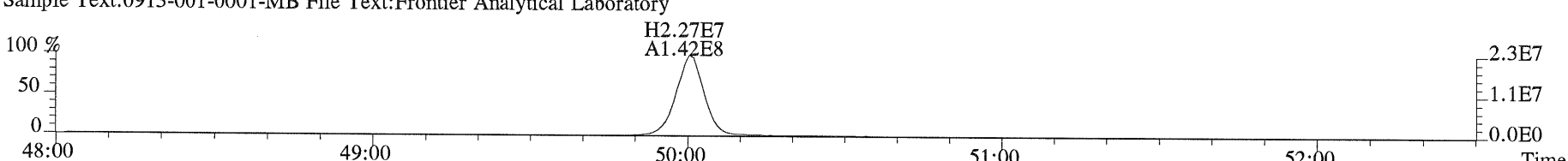
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



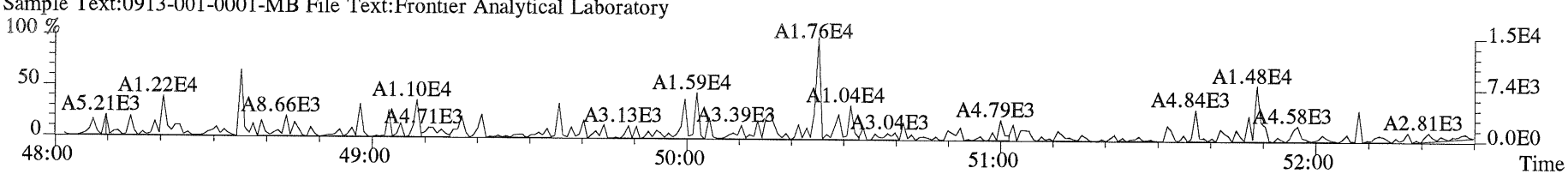
File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



File:25JUL06M #1-348 Acq:25-JUL-2006 19:25:45 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-MB File Text:Frontier Analytical Laboratory



0913-001-0001-OPR

USEPA - ITD

FORM 8A
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Solid OPR Data Filename: 25JUL06M Sam:5

Ext. Date: 7/24/06 Shift: Day Analysis Date: 25-JUL-06 18:30:25

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
NATIVE ANALYTES			
2,3,7,8-TCDD	10	8.19	6.70 - 15.8
1,2,3,7,8-PeCDD	50	45.7	35.0 - 71.0
1,2,3,4,7,8-HxCDD	50	48.0	35.0 - 82.0
1,2,3,6,7,8-HxCDD	50	47.8	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50	48.4	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	50	47.9	35.0 - 70.0
OCDD	100	93.0	78.0 - 144
2,3,7,8-TCDF	10	8.52	7.50 - 15.8
1,2,3,7,8-PeCDF	50	48.4	40.0 - 67.0
2,3,4,7,8-PeCDF	50	48.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	50	49.7	36.0 - 67.0
1,2,3,6,7,8-HxCDF	50	49.3	42.0 - 65.0
2,3,4,6,7,8-HxCDF	50	48.4	35.0 - 78.0
1,2,3,7,8,9-HxCDF	50	48.8	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	50	49.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	50	48.9	39.0 - 69.0
OCDF	100	97.6	63.0 - 170

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613

Analyst: [signature] Date: 7/26/06

USEPA - ITD

FORM 8B
PCDD/PCDF ONGOING PRECISION AND RECOVERY (OPR)

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Matrix (aqueous/solid/leachate): Solid OPR Data Filename: 25JUL06M Sam:5

Ext. Date: 7/24/06 Shift: Day Analysis Date: 25-JUL-06 18:30:25

ALL CONCENTRATIONS REPORTED ON THIS FORM ARE CONCENTRATIONS IN EXTRACT.

	SPIKE CONC. (ng/mL)	CONC. FOUND (ng/mL)	OPR CONC. LIMITS (1) (ng/mL)
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	100	102	20.0 - 175
13C-1,2,3,7,8-PeCDD	100	89.4	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	100	93.7	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	100	94.2	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	100	111	26.0 - 166
13C-OCDD	200	219	26.0 - 397
13C-2,3,7,8-TCDF	100	103	22.0 - 152
13C-1,2,3,7,8-PeCDF	100	90.5	21.0 - 192
13C-2,3,4,7,8-PeCDF	100	88.7	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	100	88.8	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	89.9	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	100	91.2	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	100	100	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	100	101	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	100	122	20.0 - 186
13C-OCDF	200	222	26.0 - 397
CLEANUP STANDARD			
37Cl-2,3,7,8-TCDD	40	38.7	12.4 - 76.4

(1) Contract-required concentration limits for OPR as specified in Table 6, Method 1613
Labeled compound concentration limits are based on required percent recovery of 25%-150%.

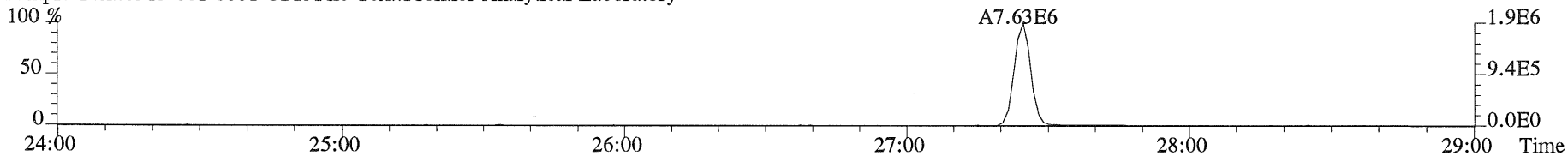
Analyst: [illegible] Date: 7/26/06

FAL ID: 0913-001-0001-OPR Filename: 25JUL06M Sam:5 Acquired: 25-JUL-06 18:30:25 ICal: PCDDFAL3-7-5-06
Client ID: OPR ConCal: ST072506M1 EndCal: ST072506M2
Results: 0913 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 94.2
WHO 1998 Tox: 117

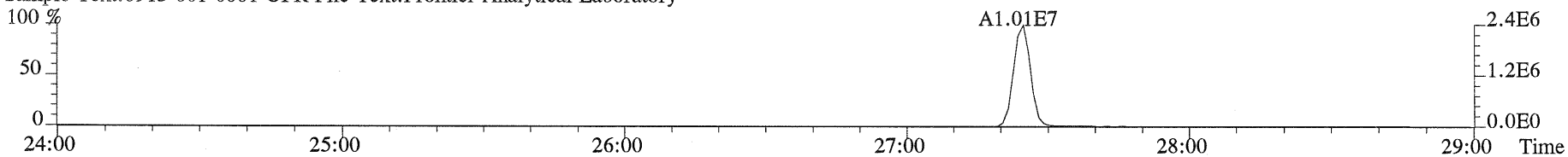
Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.77e+07	0.76 y	27:25	1.10	8.19		2.50	-	*	
1,2,3,7,8-PeCDD	6.85e+07	1.58 y	33:12	0.90	45.7		2.50	-	*	
1,2,3,4,7,8-HxCDD	5.60e+07	1.26 y	38:33	0.96	48.0		2.50	-	*	
1,2,3,6,7,8-HxCDD	5.81e+07	1.28 y	38:43	0.83	47.8		2.50	-	*	
1,2,3,7,8,9-HxCDD	5.02e+07	1.28 y	39:10	0.77	48.4		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	6.31e+07	1.05 y	44:08	0.86	47.9		2.50	-	*	
OCDD	9.09e+07	0.90 y	49:41	0.87	93.0		2.50	-	*	
2,3,7,8-TCDF	2.27e+07	0.77 y	26:40	0.99	8.52		2.50	-	*	
1,2,3,7,8-PeCDF	9.69e+07	1.59 y	31:29	0.80	48.4		2.50	-	*	
2,3,4,7,8-PeCDF	9.81e+07	1.59 y	32:48	0.88	48.4		2.50	-	*	
1,2,3,4,7,8-HxCDF	7.75e+07	1.26 y	37:10	1.42	49.7		2.50	-	*	
1,2,3,6,7,8-HxCDF	7.57e+07	1.26 y	37:22	0.97	49.3		2.50	-	*	
2,3,4,6,7,8-HxCDF	7.05e+07	1.25 y	38:19	1.26	48.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	9.23e+07	1.28 y	39:45	1.34	48.8		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	7.94e+07	1.02 y	42:15	1.28	49.7		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	7.29e+07	1.03 y	45:03	1.22	48.9		2.50	-	*	
OCDF	1.14e+08	0.89 y	50:02	0.90	97.6		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.97e+08	0.78 y	27:23	1.00	102					102
13C-1,2,3,7,8-PeCDD	1.66e+08	1.58 y	33:11	0.96	89.4					89.4
13C-1,2,3,4,7,8-HxCDD	1.22e+08	1.29 y	38:32	0.90	93.7					93.7
13C-1,2,3,6,7,8-HxCDD	1.47e+08	1.28 y	38:42	1.09	94.2					94.2
13C-1,2,3,4,6,7,8-HpCDD	1.53e+08	1.07 y	44:07	0.96	111					111
13C-OCDD	2.24e+08	0.89 y	49:39	0.71	219					110
13C-2,3,7,8-TCDF	2.68e+08	0.79 y	26:39	0.94	103					103
13C-1,2,3,7,8-PeCDF	2.51e+08	1.61 y	31:28	1.00	90.5					90.5
13C-2,3,4,7,8-PeCDF	2.31e+08	1.60 y	32:46	0.94	88.7					88.7
13C-1,2,3,4,7,8-HxCDF	1.10e+08	0.51 y	37:09	0.86	88.8					88.8
13C-1,2,3,6,7,8-HxCDF	1.58e+08	0.50 y	37:21	1.23	89.9					89.9
13C-2,3,4,6,7,8-HxCDF	1.16e+08	0.51 y	38:17	0.88	91.2					91.2
13C-1,2,3,7,8,9-HxCDF	1.41e+08	0.51 y	39:43	0.98	100					100
13C-1,2,3,4,6,7,8-HpCDF	1.25e+08	0.43 y	42:14	0.86	101					101
13C-1,2,3,4,7,8,9-HpCDF	1.22e+08	0.43 y	45:02	0.70	122					122
13C-OCDF	2.61e+08	0.88 y	50:01	0.82	222					111
37Cl-2,3,7,8-TCDD	6.08e+07		27:25	0.81	38.7					96.8
13C-1,2,3,4-TCDD	1.94e+08	0.80 y	26:49	-	101					
13C-1,2,3,4-TCDF	2.77e+08	0.77 y	25:34	-	96.2					
13C-1,2,3,7,8,9-HxCDD	1.43e+08	1.28 y	39:09	-	96.1					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	1.79e+07		23:09	1.10	8.29		2.50	-	*	10
Total Penta-Dioxins	6.86e+07		33:12	0.90	45.8		2.50	-	*	4
Total Hexa-Dioxins	1.65e+08		38:33	0.85	145		2.50	-	*	7
Total Hepta-Dioxins	6.36e+07		42:46	0.86	48.3		2.50	-	*	5
Total Tetra-Furans	2.35e+07		23:37	0.99	8.83		2.50	-	*	11
1st Fn. Tot Penta-Furans	1.92e+05		22:49	0.84	0.0952		2.50	-	*	28 PeCDF
Total Penta-Furans	1.97e+08		31:15	0.84	97.9		2.50	-	*	12 98.0
Total Hexa-Furans	3.18e+08		35:29	1.22	198		2.50	-	*	22
Total Hepta-Furans	1.55e+08		42:15	1.25	100		2.50	-	*	12

Analyst: [signature] Date: 7/26/06

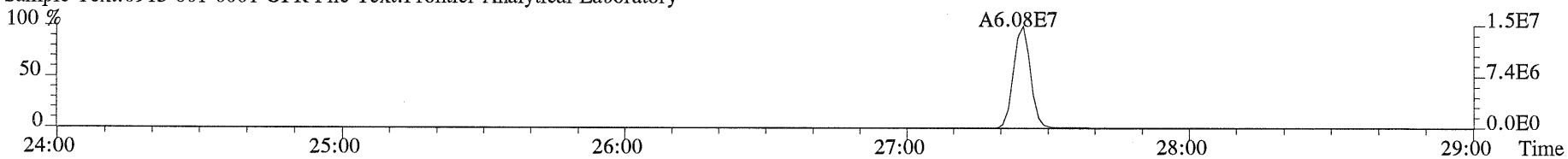
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



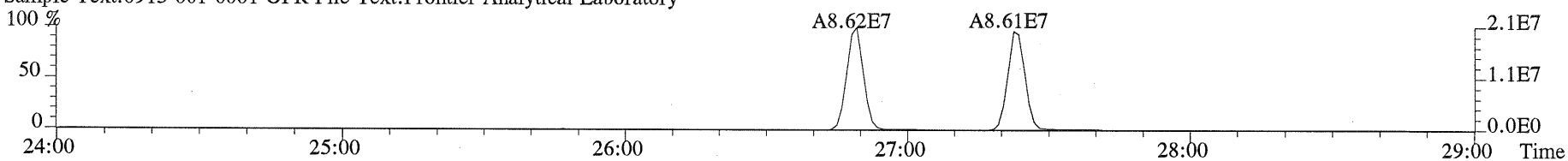
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



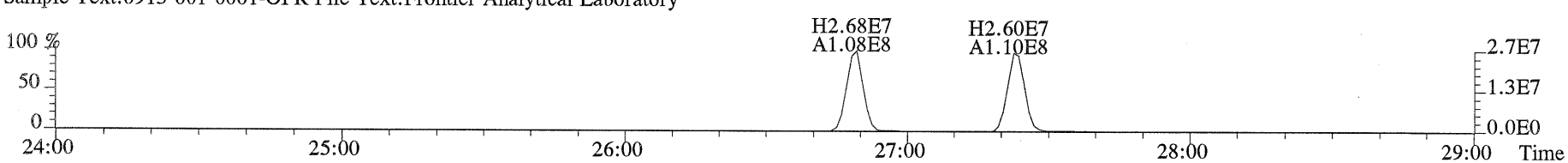
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



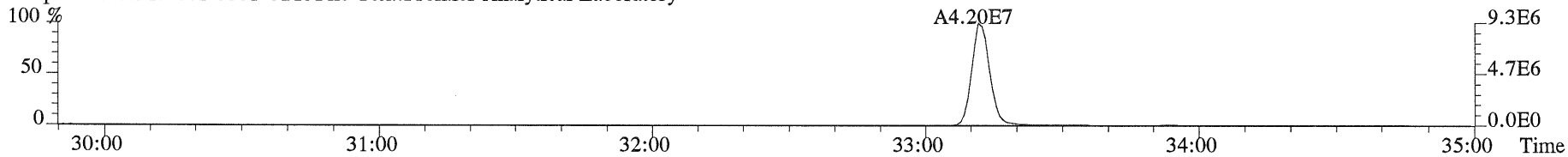
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



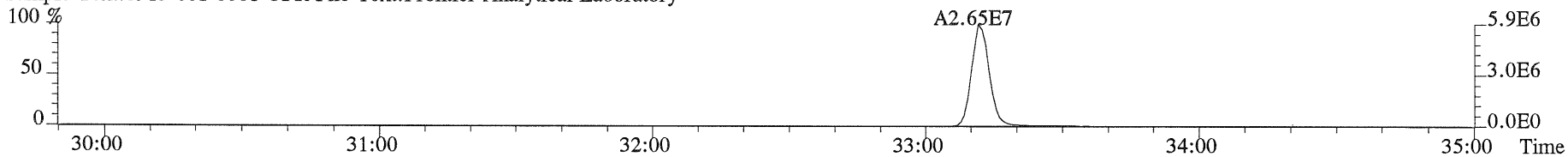
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



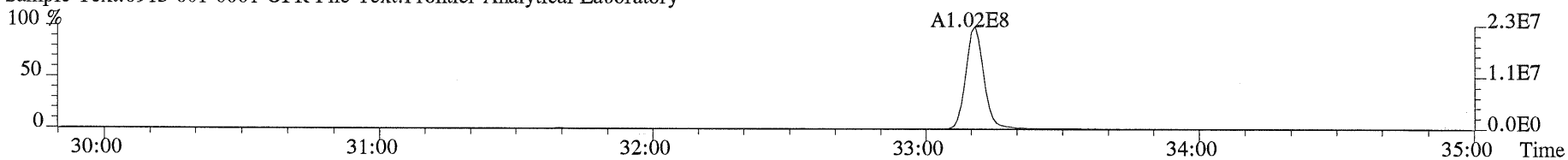
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



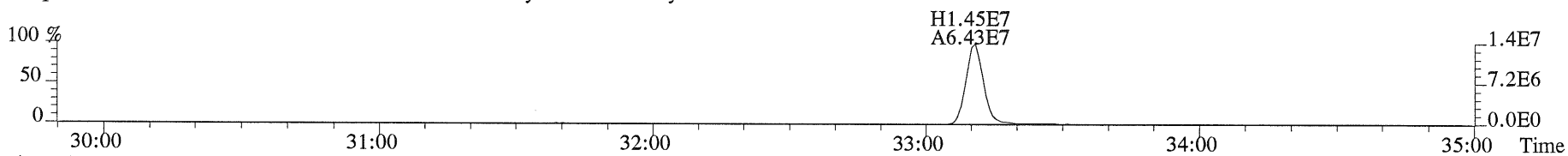
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



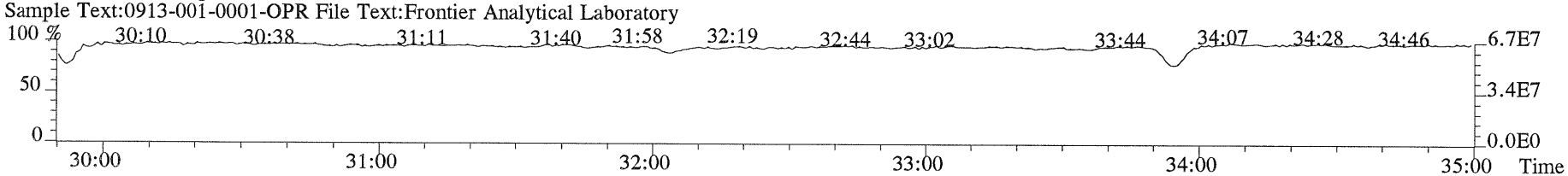
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



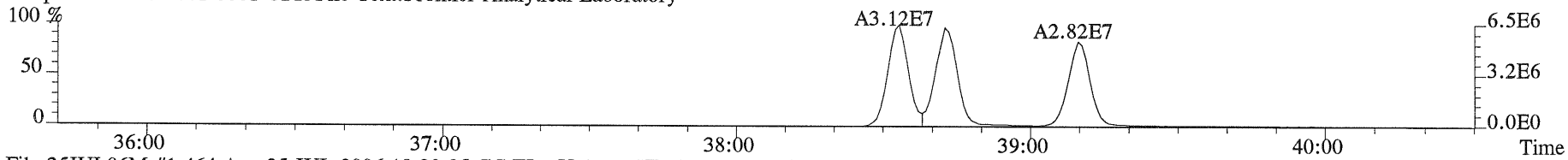
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



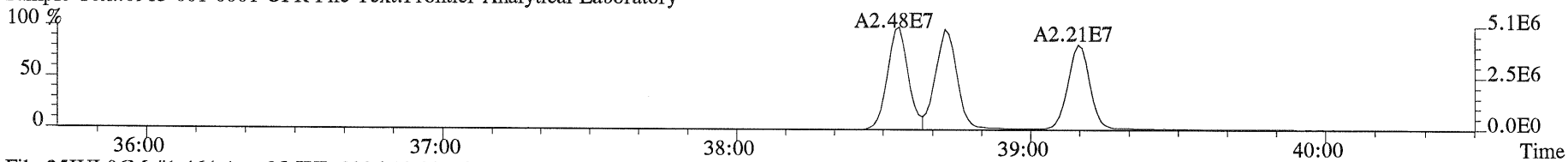
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



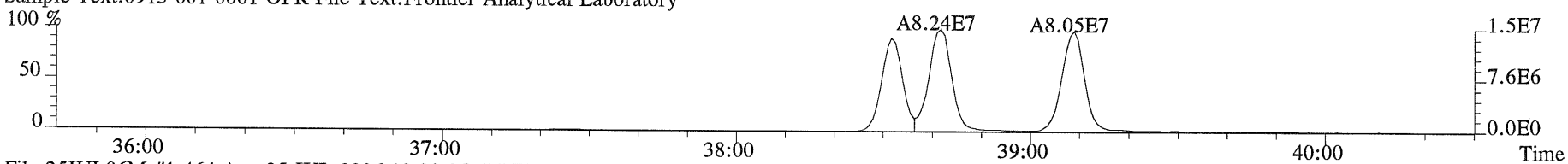
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



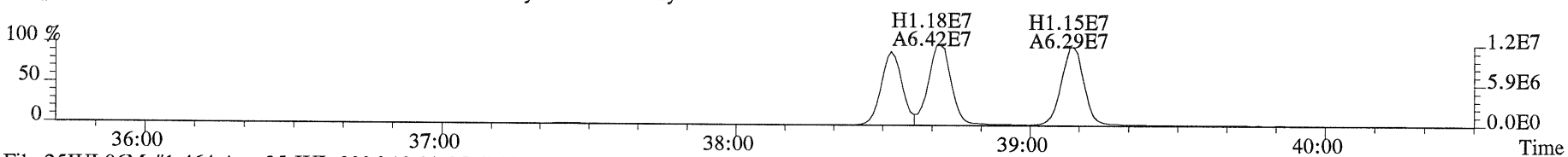
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



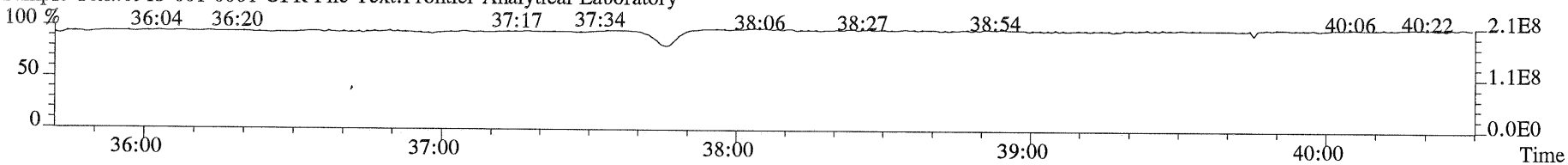
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



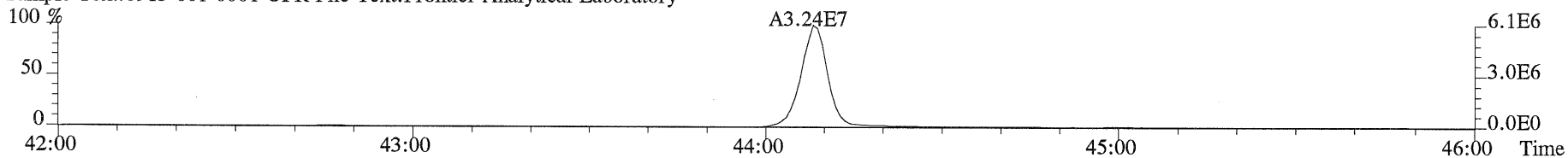
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



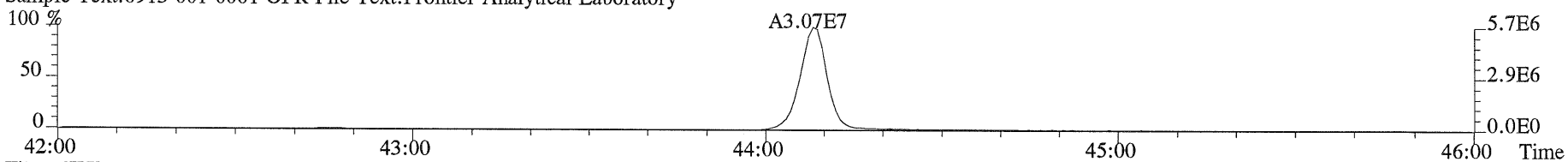
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



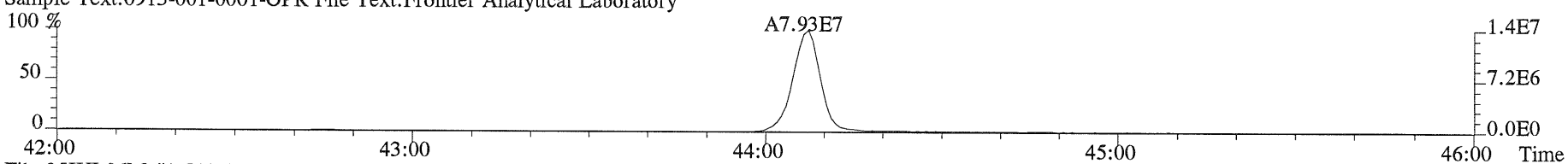
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



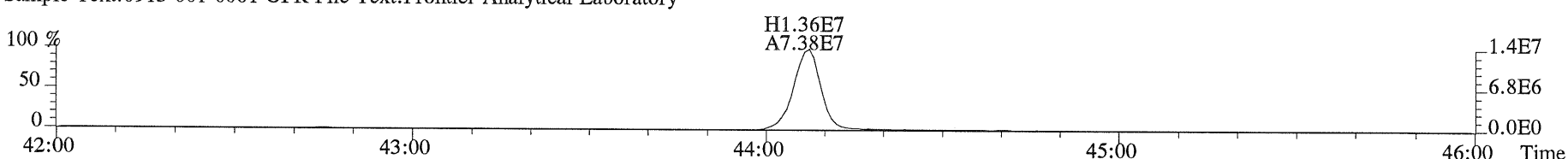
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



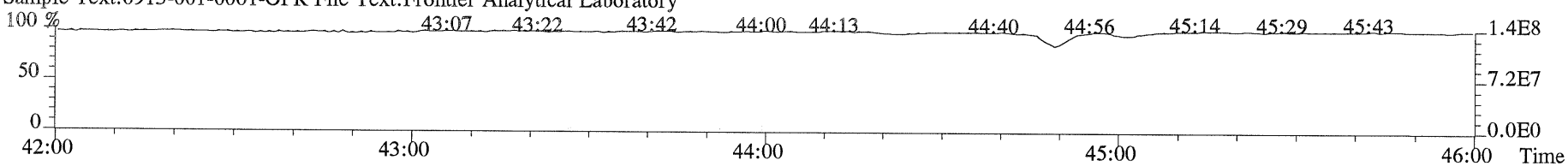
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



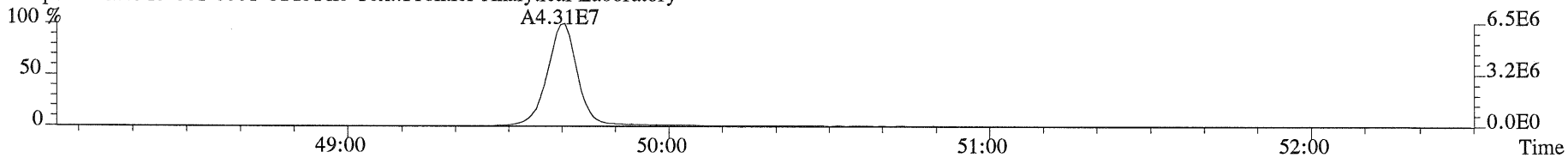
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



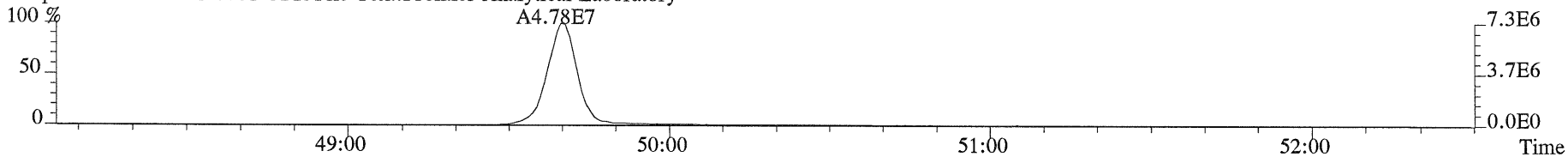
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



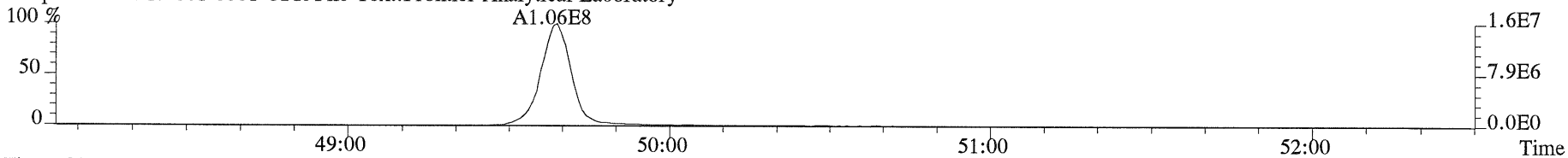
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



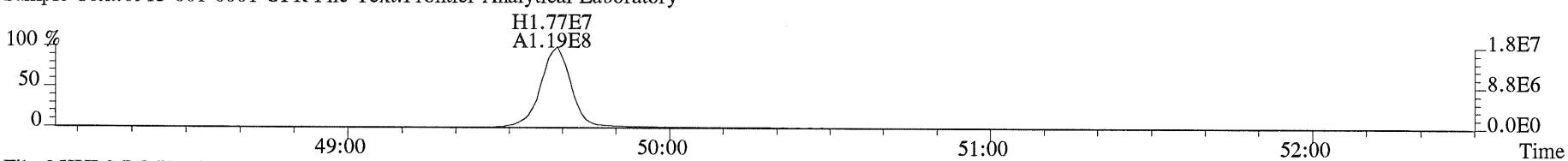
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



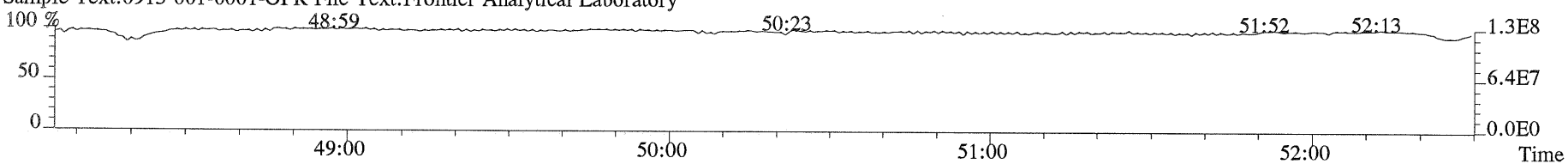
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



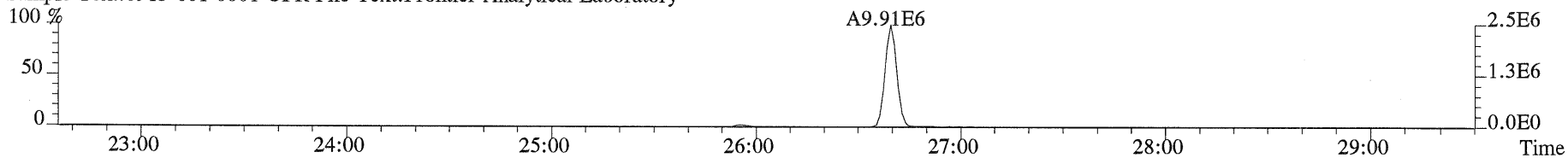
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



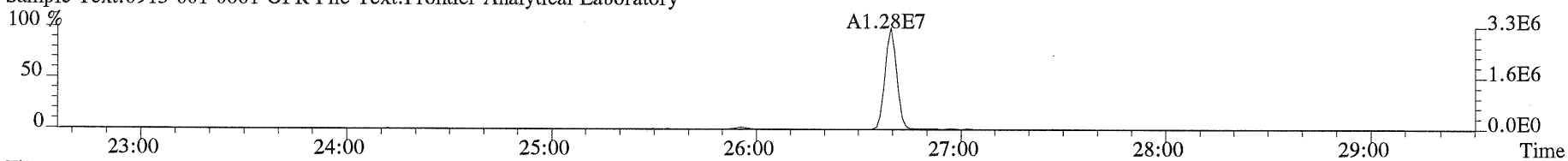
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



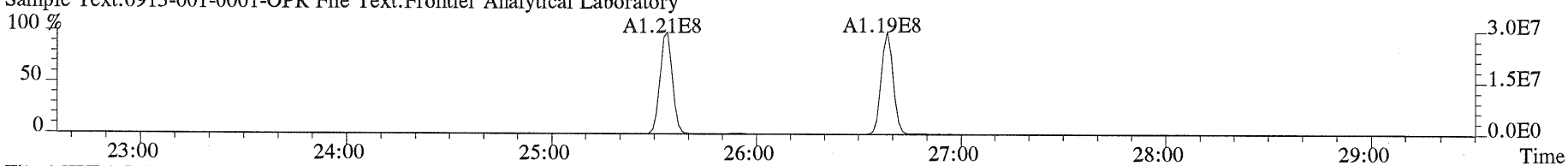
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



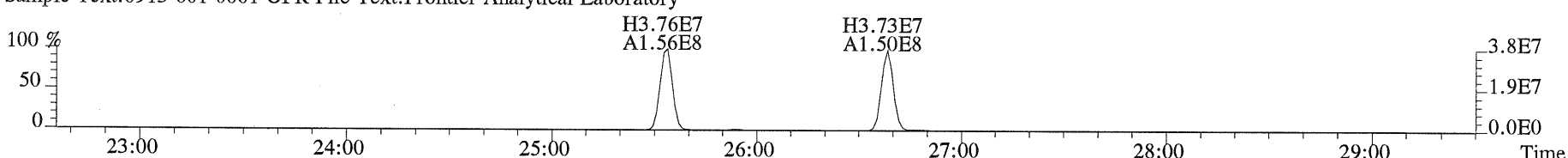
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



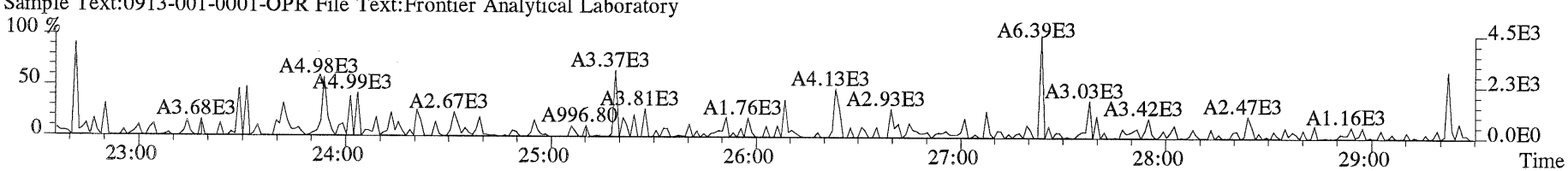
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



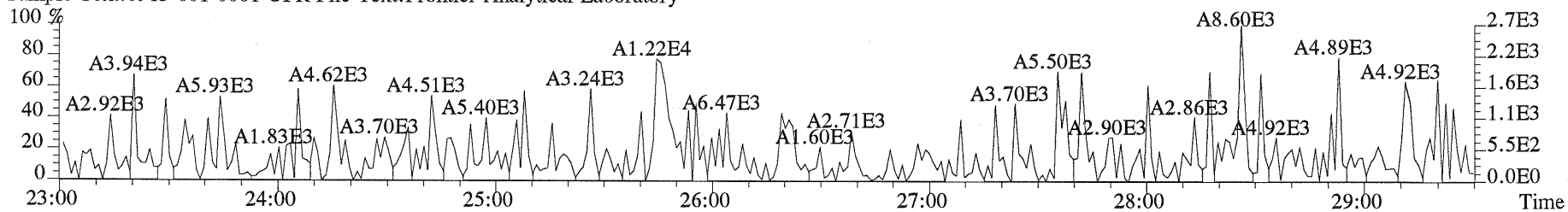
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



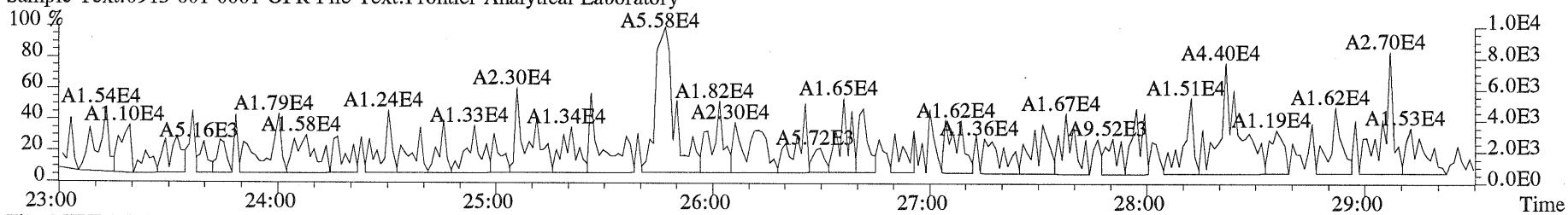
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



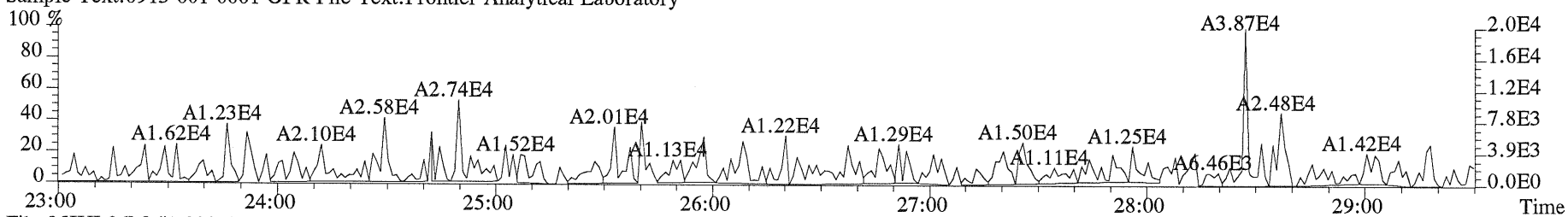
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



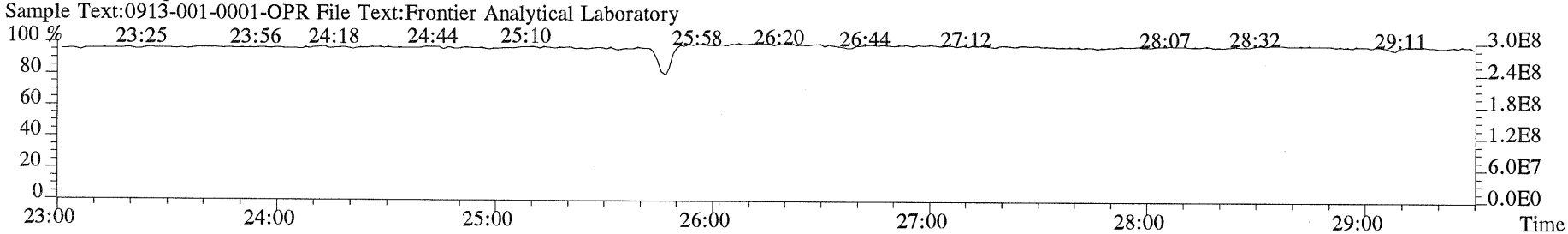
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



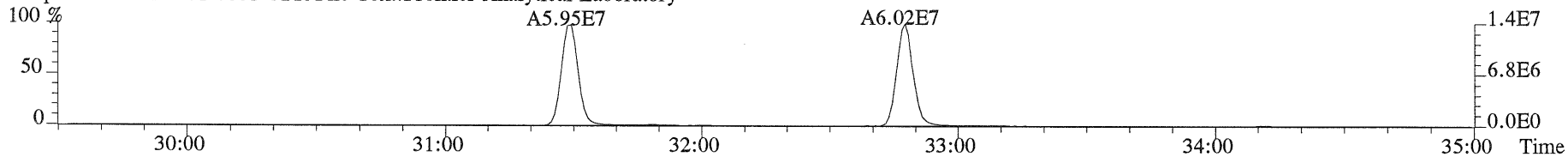
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



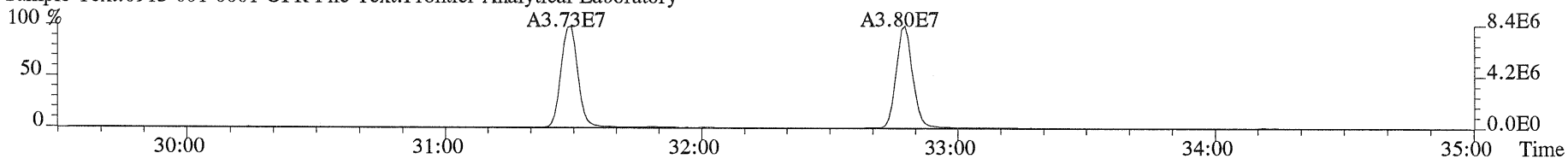
File:25JUL06M #1-390 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



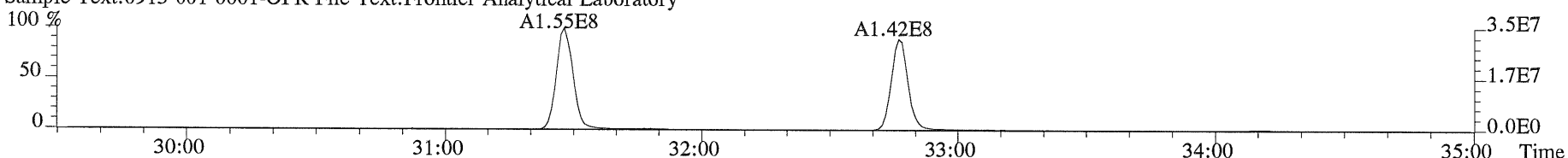
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



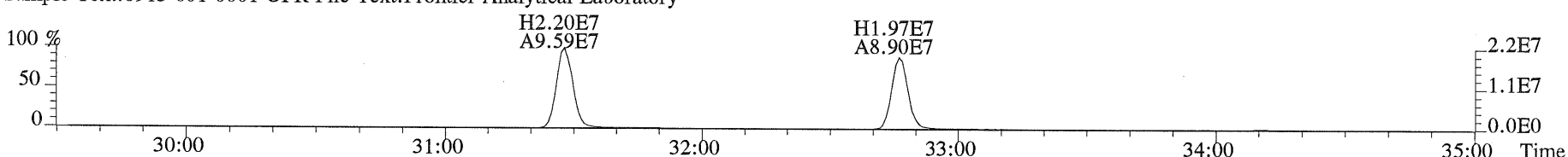
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



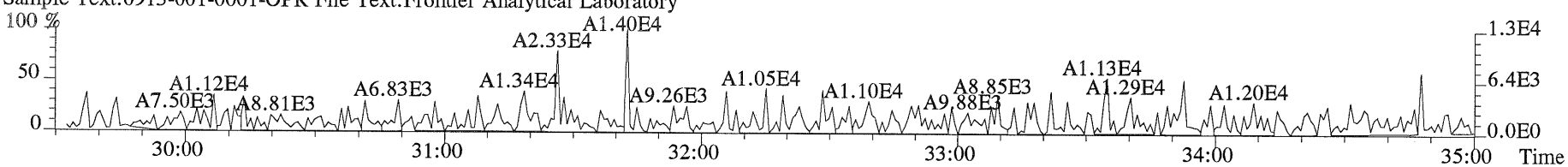
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



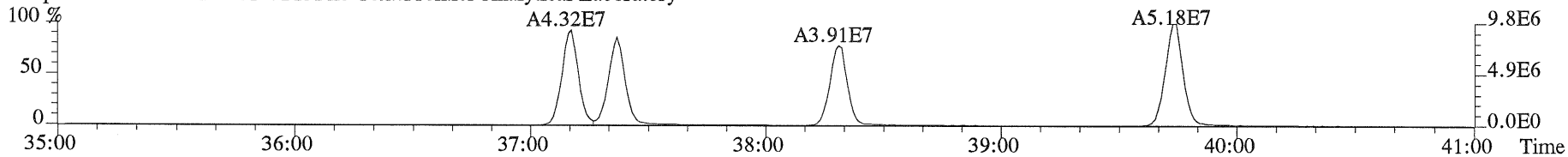
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



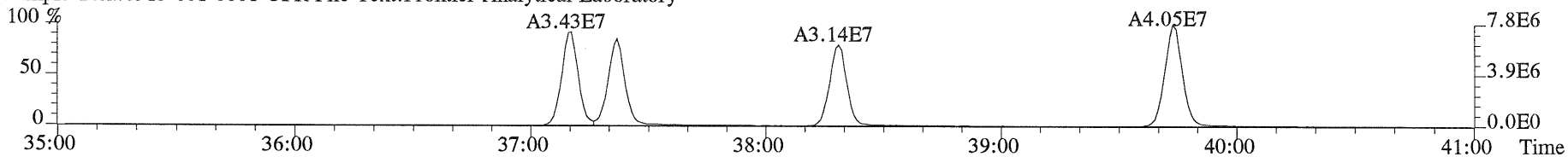
File:25JUL06M #1-424 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



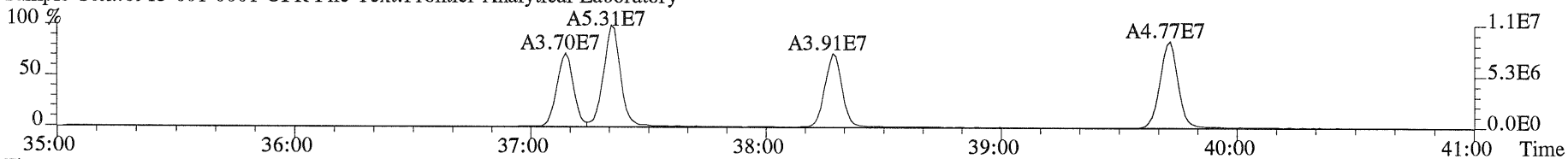
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



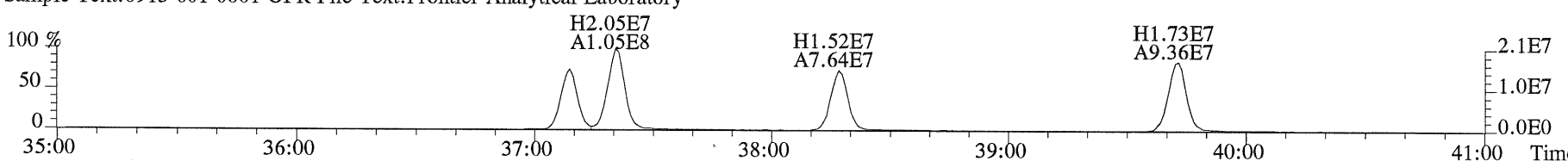
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



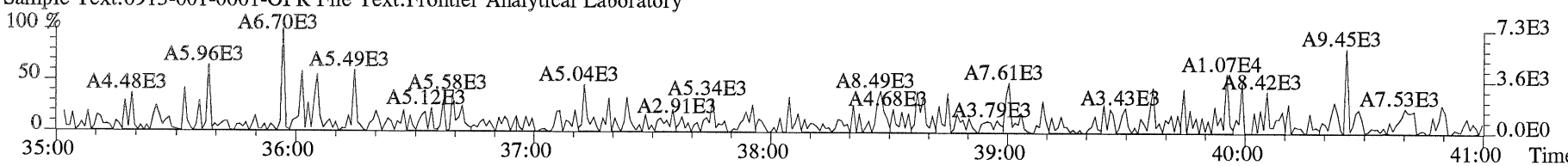
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



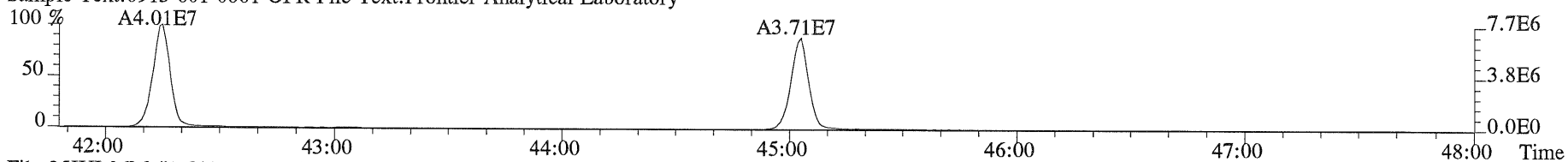
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



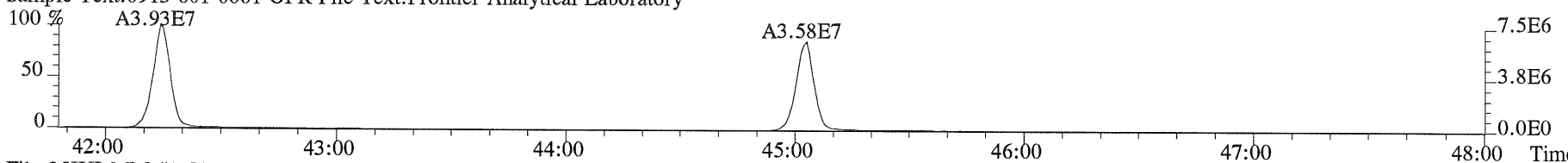
File:25JUL06M #1-464 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



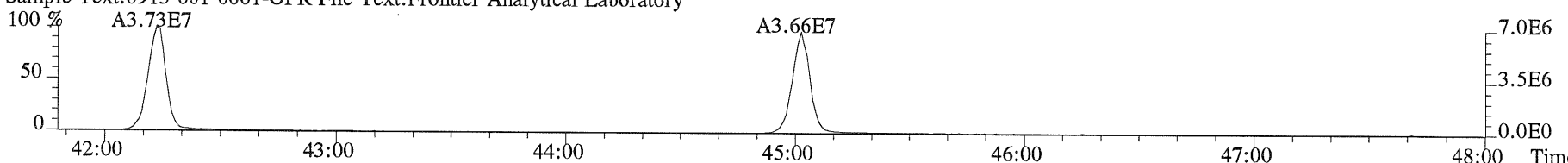
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



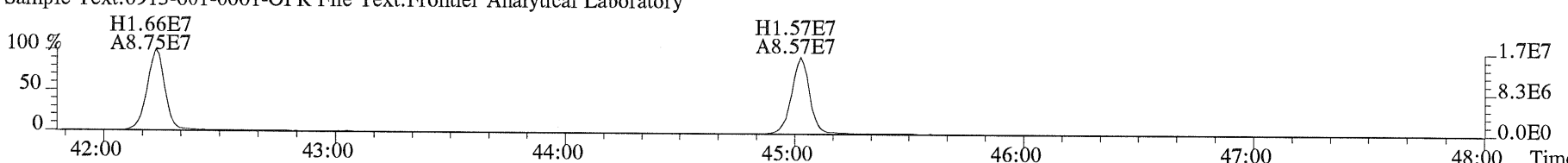
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



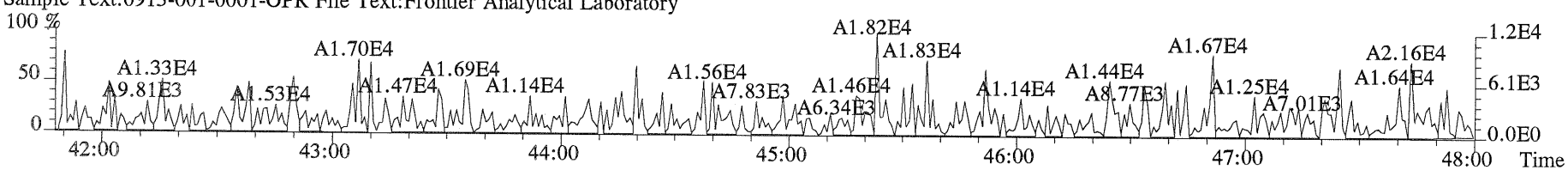
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



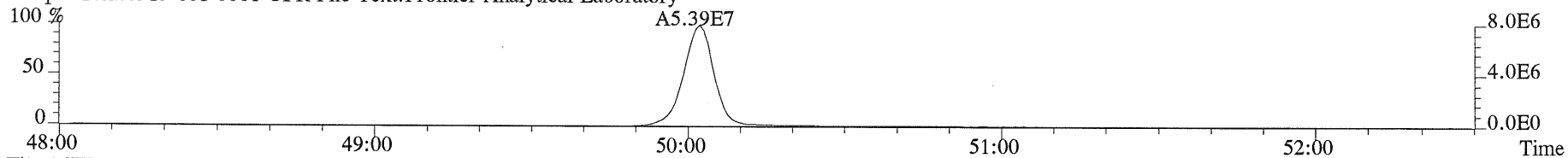
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



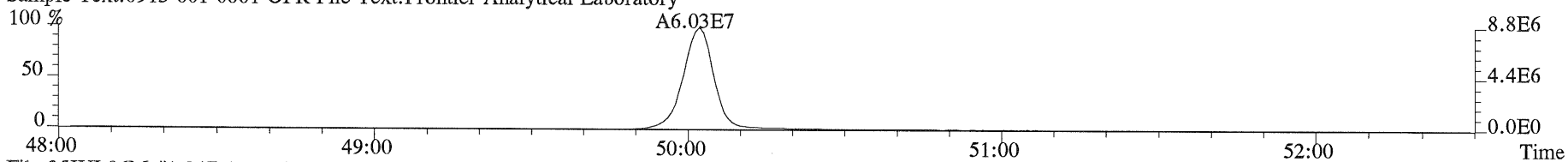
File:25JUL06M #1-541 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



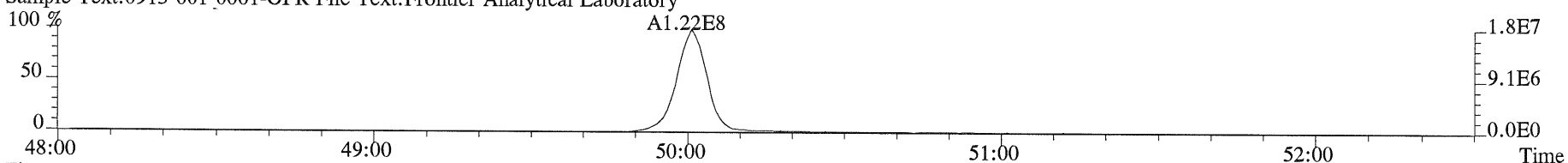
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



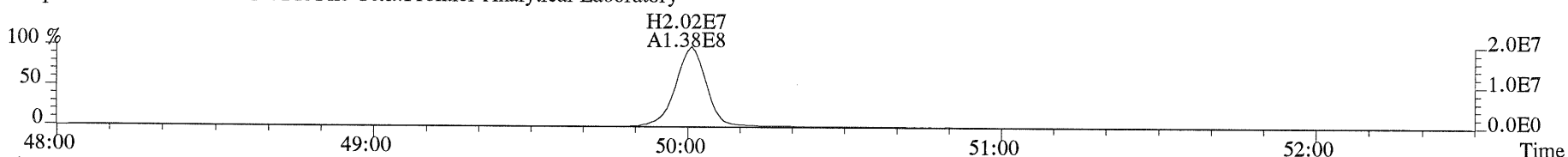
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



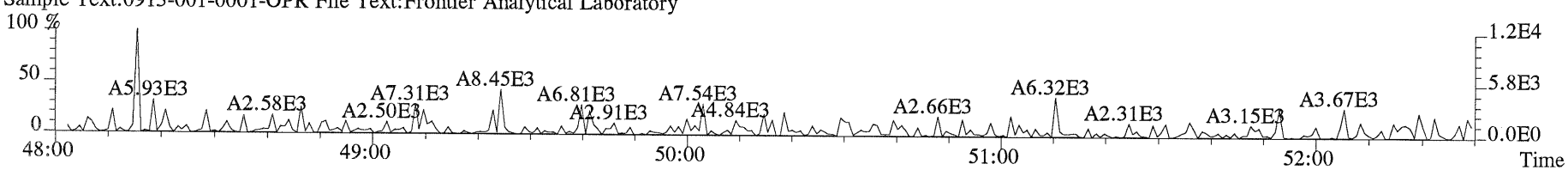
File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



File:25JUL06M #1-347 Acq:25-JUL-2006 18:30:25 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:0913-001-0001-OPR File Text:Frontier Analytical Laboratory



FAL ID: 3967-001-0001-SA Filename: 26JUL06M Sam:6 Acquired: 26-JUL-06 22:11:13 ICal: PCDDFAL3-7-5-06
Client ID: C-4, S-1 (1:10 DIL) ConCal: ST072606M1 EndCal: ST072606M2
Results: 3967-01DIL GC Column: DB5 Amount: 10.02 NATO 1989 Tox: 4.12
WHO 1998 Tox: 3.38

Name	Resp	RA		RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	*	*	n	NotFnd	1.10	*		2.50	1090	0.205	
1,2,3,7,8-PeCDD	*	*	n	NotFnd	0.90	*		2.50	2130	1.96	
1,2,3,4,7,8-HxCDD	*	*	n	NotFnd	0.96	*		2.50	2820	1.62	
1,2,3,6,7,8-HxCDD	2.53e+05	1.28	y	38:45	0.83	4.98		2.50	-	*	
1,2,3,7,8,9-HxCDD	1.36e+05	1.14	y	39:10	0.77	3.15		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	3.65e+06	1.05	y	44:08	0.86	83.6		2.50	-	*	
OCDD	2.45e+07	0.88	y	49:40	0.87	737		2.50	-	*	
2,3,7,8-TCDF	8.04e+04	0.88	y	26:39	0.99	0.631		2.50	-	*	
1,2,3,7,8-PeCDF	*	*	n	NotFnd	0.80	*		2.50	2160	0.823	
2,3,4,7,8-PeCDF	1.11e+05	1.37	y	32:55	0.88	1.12	J	2.50	-	*	
1,2,3,4,7,8-HxCDF	9.76e+04	1.26	y	37:12	1.42	1.45	J	2.50	-	*	
1,2,3,6,7,8-HxCDF	1.75e+05	1.12	y	37:23	0.97	2.76		2.50	-	*	
2,3,4,6,7,8-HxCDF	1.24e+05	1.33	y	38:22	1.26	2.10	J	2.50	-	*	
1,2,3,7,8,9-HxCDF	*	*	n	NotFnd	1.34	*		2.50	1340	0.403	
1,2,3,4,6,7,8-HpCDF	2.08e+06	1.04	y	42:16	1.28	38.0		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	7.65e+04	0.99	y	45:03	1.22	1.60	J	2.50	-	*	
OCDF	3.03e+06	0.85	y	50:03	0.90	81.7		2.50	-	*	
											Rec
13C-2,3,7,8-TCDD	1.96e+07	0.81	y	27:24	1.00	193					96.9
13C-1,2,3,7,8-PeCDD	1.53e+07	1.59	y	33:17	0.96	158					79.0
13C-1,2,3,4,7,8-HxCDD	1.00e+07	1.26	y	38:33	0.90	200					100
13C-1,2,3,6,7,8-HxCDD	1.22e+07	1.28	y	38:43	1.09	203					102
13C-1,2,3,4,6,7,8-HpCDD	1.01e+07	1.06	y	44:08	0.96	190					95.4
13C-OCDD	1.52e+07	0.88	y	49:39	0.71	385					96.4
13C-2,3,7,8-TCDF	2.56e+07	0.76	y	26:39	0.94	192					96.2
13C-1,2,3,7,8-PeCDF	2.18e+07	1.55	y	31:29	1.00	153					76.8
13C-2,3,4,7,8-PeCDF	2.26e+07	1.58	y	32:51	0.94	169					84.6
13C-1,2,3,4,7,8-HxCDF	9.41e+06	0.51	y	37:10	0.86	197					98.9
13C-1,2,3,6,7,8-HxCDF	1.30e+07	0.53	y	37:22	1.23	191					95.8
13C-2,3,4,6,7,8-HxCDF	9.36e+06	0.50	y	38:18	0.88	191					95.6
13C-1,2,3,7,8,9-HxCDF	1.06e+07	0.50	y	39:45	0.98	195					97.5
13C-1,2,3,4,6,7,8-HpCDF	8.55e+06	0.45	y	42:14	0.86	179					89.5
13C-1,2,3,4,7,8,9-HpCDF	7.86e+06	0.45	y	45:02	0.70	203					101
13C-OCDF	1.65e+07	0.88	y	50:01	0.82	362					90.8
37Cl-2,3,7,8-TCDD	6.03e+06			27:25	0.81	73.6					92.1
13C-1,2,3,4-TCDD	2.02e+07	0.81	y	26:49	-	1.05					
13C-1,2,3,4-TCDF	2.84e+07	0.74	y	25:34	-	0.985					
13C-1,2,3,7,8,9-HxCDD	1.11e+07	1.26	y	39:10	-	0.740					
								Fac	Noise	DL	#Hom
Total Tetra-Dioxins	2.28e+05			24:24	1.10	2.12		2.50	-	*	3
Total Penta-Dioxins	1.71e+05			30:16	0.90	2.47	J	2.50	-	*	1
Total Hexa-Dioxins	2.07e+06			36:08	0.85	43.6		2.50	-	*	5
Total Hepta-Dioxins	7.89e+06			42:47	0.86	181		2.50	-	*	2
Total Tetra-Furans	1.17e+06			23:50	0.99	9.17		2.50	-	*	10
1st Fn. Tot Penta-Furans	5.90e+05			28:27	0.84	6.35		2.50	-	*	1 PeCDF
Total Penta-Furans	6.21e+05			30:14	0.84	6.60		2.50	-	*	3 12.9
Total Hexa-Furans	2.51e+06			35:17	1.22	38.9		2.50	-	*	6
Total Hepta-Furans	5.39e+06			42:16	1.25	102		2.50	-	*	3

Analyst: TC Date: 7/31/06

Totals class: Total Tetra-Dioxins Entry #: 38

Run: 11 File: 26JUL06M S: 6 I: 1 F: 1
Acquired: 26-JUL-06 22:11:13

Total Concentration: 2.12 Unnamed Concentration: 2.119

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
24:24	3.74e+04	4.88e+04	0.77	y	8.62e+04	0.799	
24:42	2.40e+04	2.98e+04	0.81	y	5.38e+04	0.499	
27:11	3.56e+04	5.28e+04	0.67	y	8.84e+04	0.820	

Totals class: Total Penta-Dioxins Entry #: 39

Run: 11 File: 26JUL06M S: 6 I: 1 F: 2
Acquired: 26-JUL-06 22:11:13

Total Concentration: 2.47 Unnamed Concentration: 2.473

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
30:16	9.92e+04	7.17e+04	1.38 y	1.71e+05	2.47	

Totals class: Total Hexa-Dioxins Entry #: 40

Run: 11 File: 26JUL06M S: 6 I: 1 F: 3
Acquired: 26-JUL-06 22:11:13

Total Concentration: 43.6 Unnamed Concentration: 35.426

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
36:08	3.48e+05	2.65e+05	1.32	y	6.13e+05	12.9	
37:03	7.52e+04	5.65e+04	1.33	y	1.32e+05	2.78	
37:28	5.19e+05	4.16e+05	1.25	y	9.35e+05	19.7	
38:45	1.42e+05	1.11e+05	1.28	y	2.53e+05	4.98	1,2,3,6,7,8-HxCDD
39:10	7.25e+04	6.36e+04	1.14	y	1.36e+05	3.15	1,2,3,7,8,9-HxCDD

Totals class: Total Hepta-Dioxins Entry #: 41

Run: 11 File: 26JUL06M S: 6 I: 1 F: 4
Acquired: 26-JUL-06 22:11:13

Total Concentration: 181 Unnamed Concentration: 97.158

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
42:47	2.21e+06	2.03e+06	1.08	y	4.24e+06	97.2	
44:08	1.87e+06	1.78e+06	1.05	y	3.65e+06	83.6	1,2,3,4,6,7,8-HpCDD

Totals class: Total Tetra-Furans Entry #: 42

Run: 11 File: 26JUL06M S: 6 I: 1 F: 1
Acquired: 26-JUL-06 22:11:13

Total Concentration: 9.17 Unnamed Concentration: 8.539

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
23:50	7.79e+04	1.10e+05	0.71	y	1.88e+05	1.47	
24:10	5.83e+04	7.07e+04	0.82	y	1.29e+05	1.01	
24:27	8.19e+04	1.08e+05	0.76	y	1.90e+05	1.49	
24:44	5.33e+04	6.27e+04	0.85	y	1.16e+05	0.910	
24:51	3.45e+04	4.02e+04	0.86	y	7.47e+04	0.586	
25:00	2.76e+04	3.93e+04	0.70	y	6.69e+04	0.525	
25:28	4.61e+04	6.69e+04	0.69	y	1.13e+05	0.887	
25:35	3.02e+04	3.99e+04	0.76	y	7.01e+04	0.550	
26:39	3.77e+04	4.27e+04	0.88	y	8.04e+04	0.631	2,3,7,8-TCDF
26:58	6.04e+04	8.06e+04	0.75	y	1.41e+05	1.11	

Totals class: 1st Fn. Tot Penta-Furans Entry #: 43

Run: 11 File: 26JUL06M S: 6 I: 1 F: 1
Acquired: 26-JUL-06 22:11:13

Total Concentration: 6.35 Unnamed Concentration: 6.345

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
28:27	3.58e+05	2.32e+05	1.54 y	5.90e+05	6.35	

Totals class: Total Penta-Furans Entry #: 44

Run: 11 File: 26JUL06M S: 6 I: 1 F: 2
Acquired: 26-JUL-06 22:11:13

Total Concentration: 6.60 Unnamed Concentration: 5.478

RT	ml Resp	m2 Resp	RA	Resp	Concentration	Name
30:14	2.21e+05	1.65e+05	1.34 y	3.86e+05	4.15	
30:55	7.04e+04	5.32e+04	1.32 y	1.24e+05	1.33	
32:55	6.44e+04	4.69e+04	1.37 y	1.11e+05	1.12	2,3,4,7,8-PeCDF

Totals class: Total Hexa-Furans Entry #: 45

Run: 11 File: 26JUL06M S: 6 I: 1 F: 3
Acquired: 26-JUL-06 22:11:13

Total Concentration: 38.9 Unnamed Concentration: 32.552

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
35:17	1.54e+05	1.18e+05	1.31	y	2.72e+05	4.18	
35:31	5.17e+05	3.77e+05	1.37	y	8.94e+05	13.7	
36:26	5.16e+05	4.36e+05	1.18	y	9.52e+05	14.6	
37:12	5.44e+04	4.32e+04	1.26	y	9.76e+04	1.45	1,2,3,4,7,8-HxCDF
37:23	9.21e+04	8.25e+04	1.12	y	1.75e+05	2.76	1,2,3,6,7,8-HxCDF
38:22	7.08e+04	5.34e+04	1.33	y	1.24e+05	2.10	2,3,4,6,7,8-HxCDF

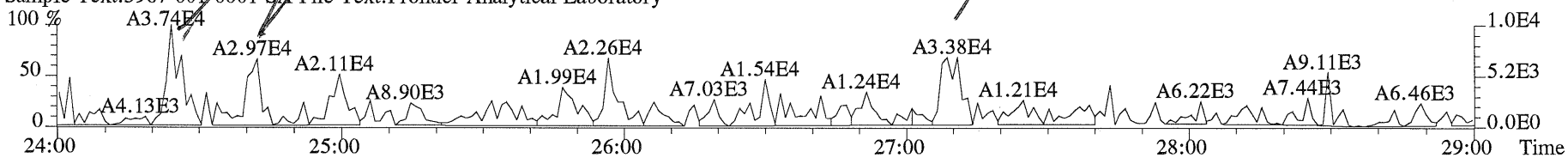
Totals class: Total Hepta-Furans Entry #: 46

Run: 11 File: 26JUL06M S: 6 I: 1 F: 4
Acquired: 26-JUL-06 22:11:13

Total Concentration: 102 Unnamed Concentration: 62.645

RT	ml Resp	m2 Resp	RA		Resp	Concentration	Name
42:16	1.07e+06	1.02e+06	1.04	y	2.08e+06	38.0	1,2,3,4,6,7,8-HpCDF
43:05	1.64e+06	1.59e+06	1.03	y	3.23e+06	62.6	
45:03	3.80e+04	3.84e+04	0.99	y	7.65e+04	1.60	1,2,3,4,7,8,9-HpCDF

File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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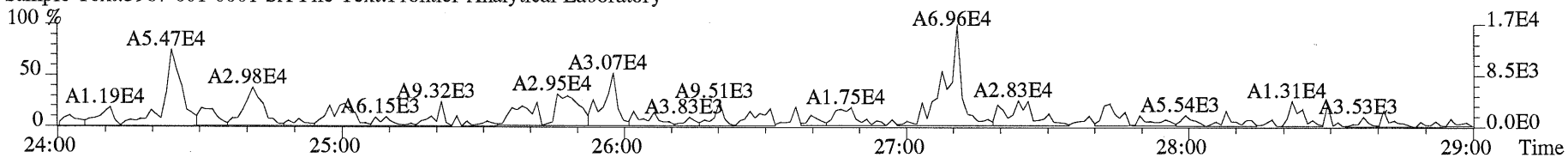

File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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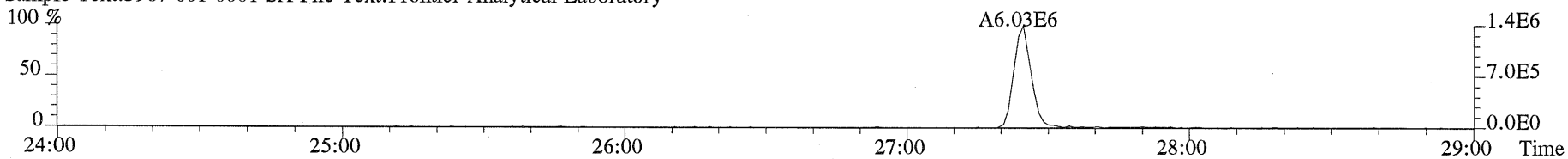
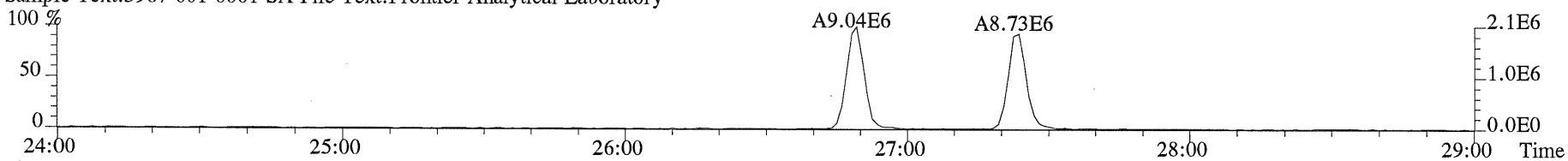
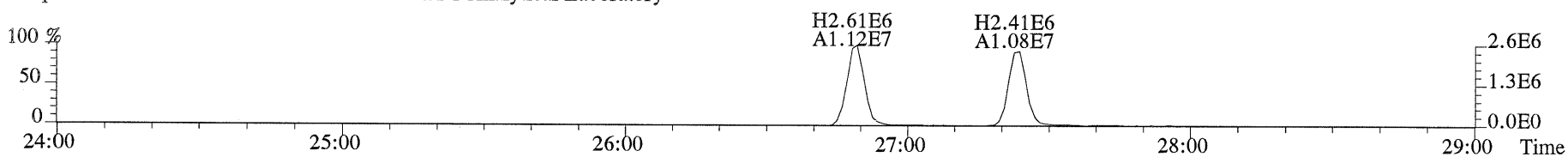


File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
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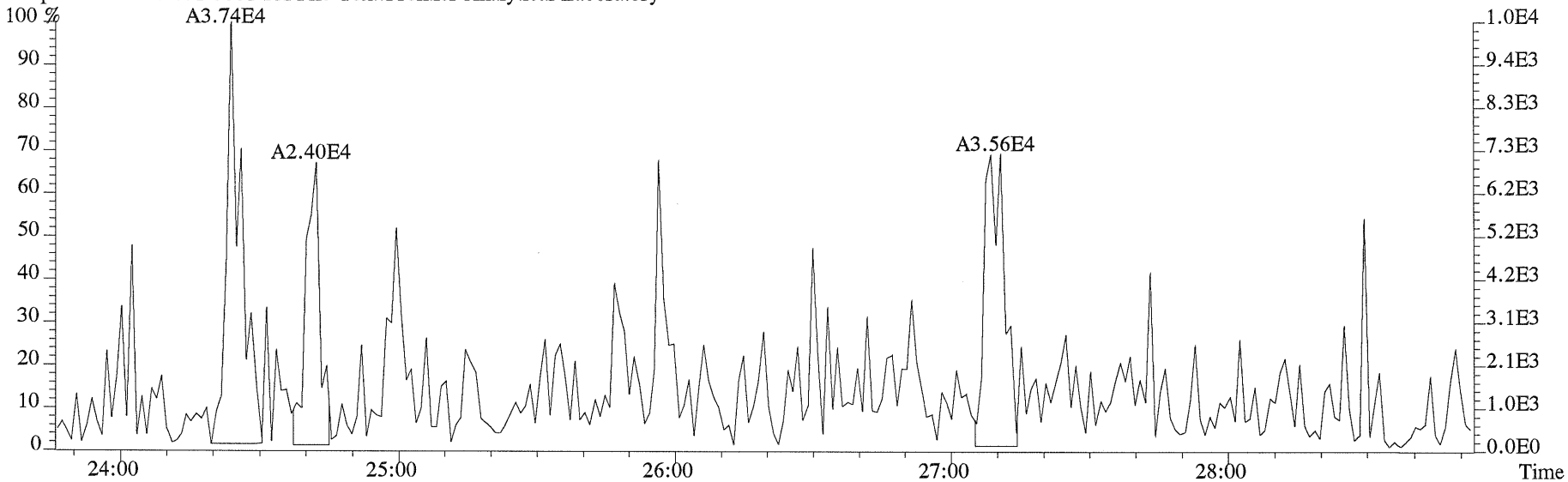

File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
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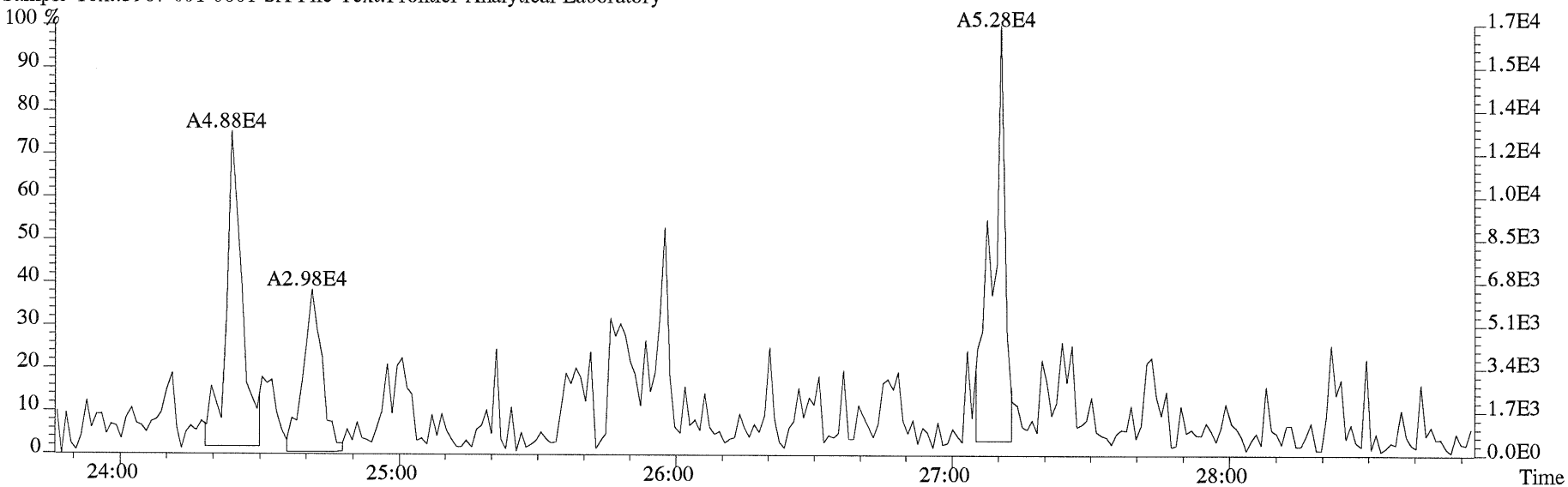
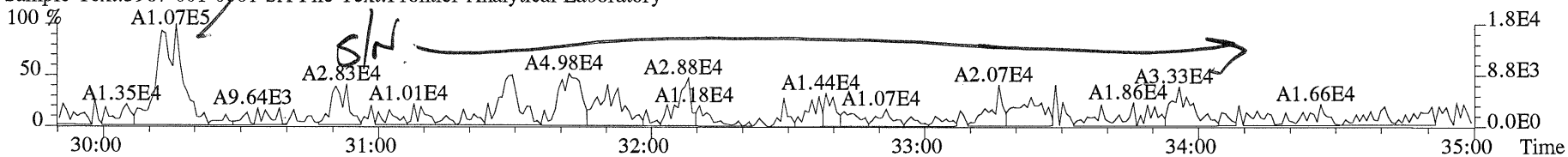
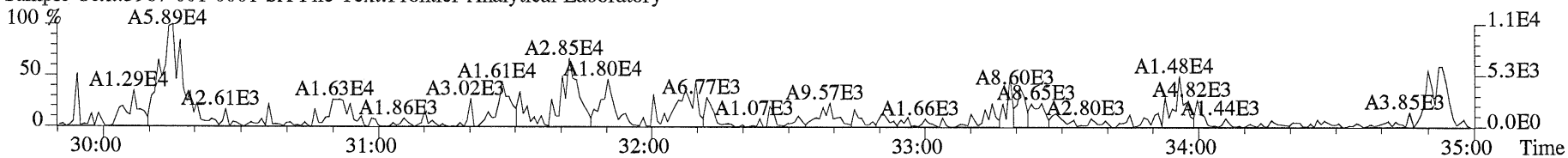


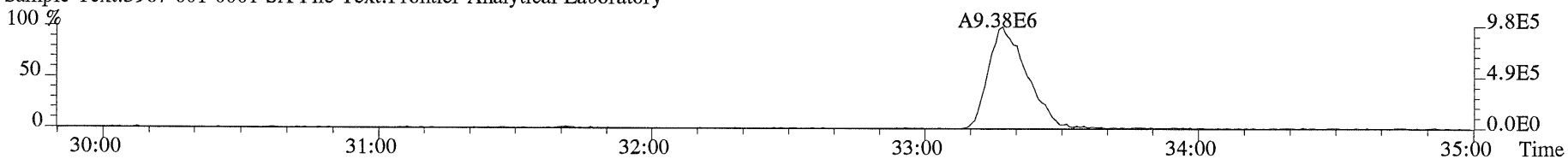
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



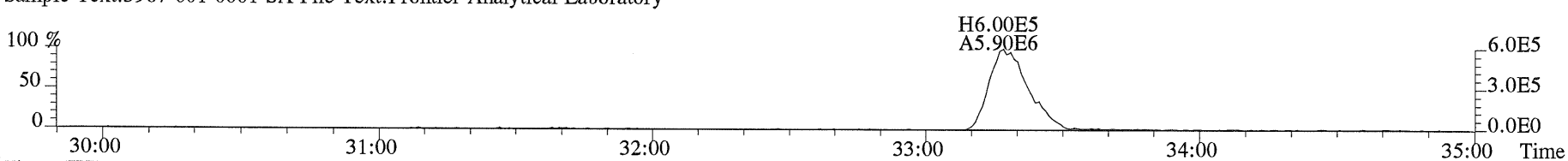
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



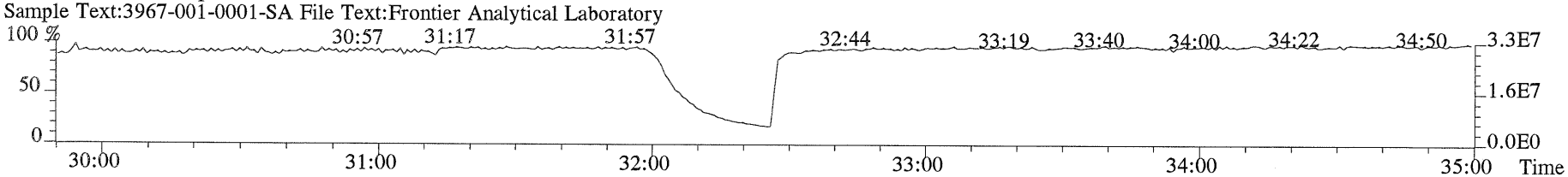
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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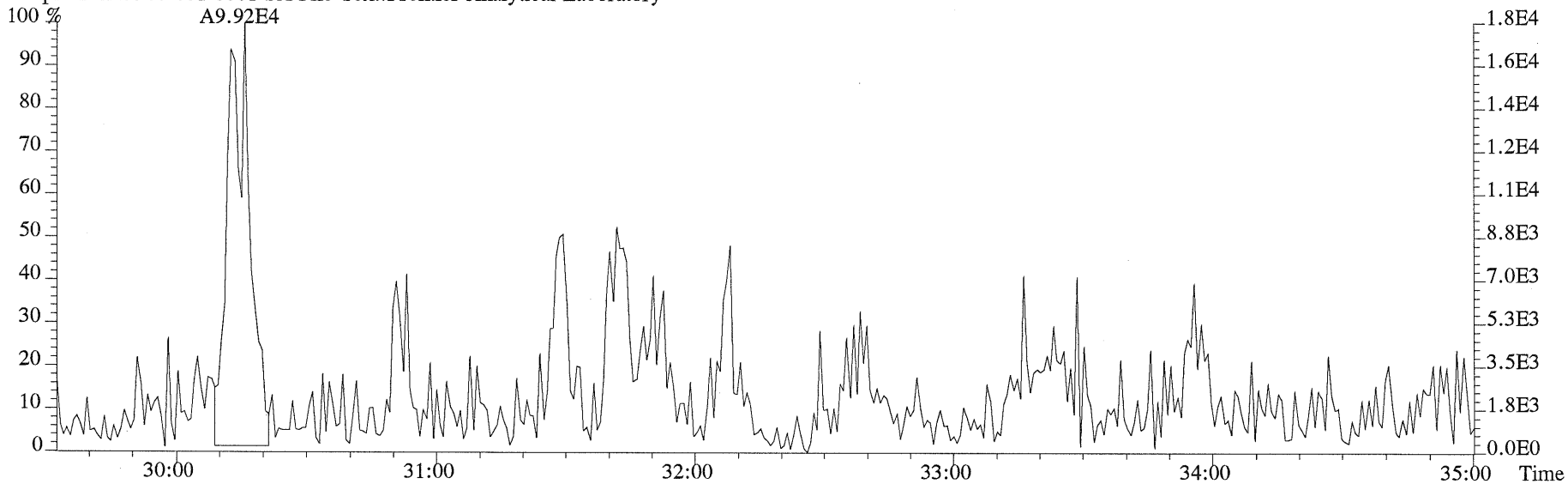

File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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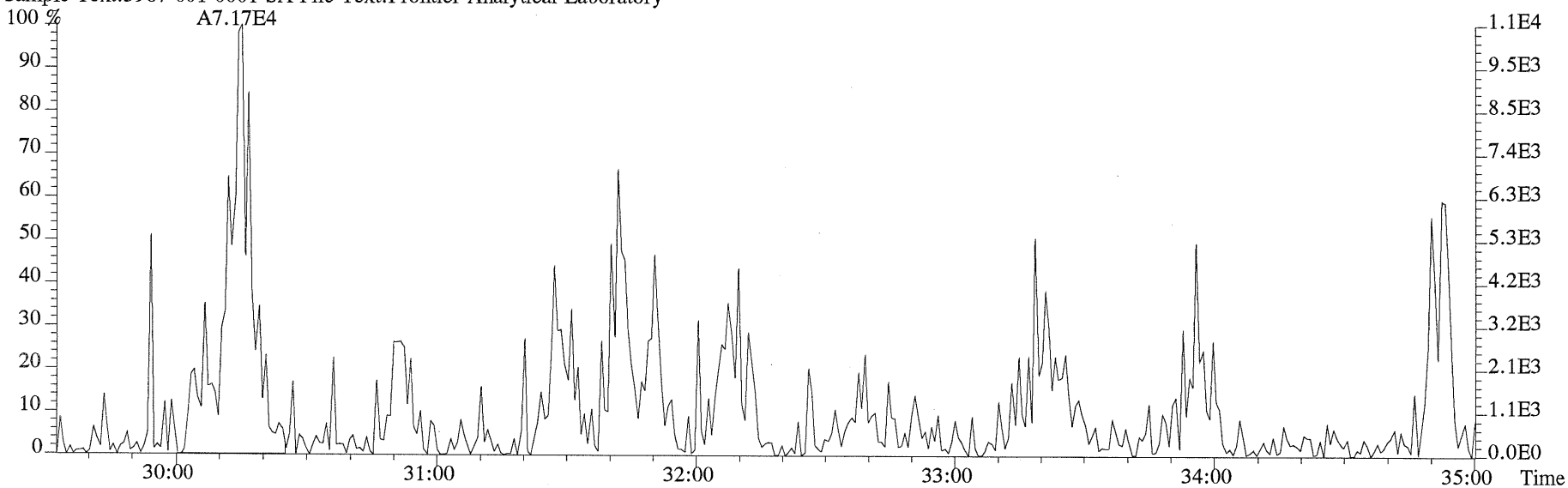
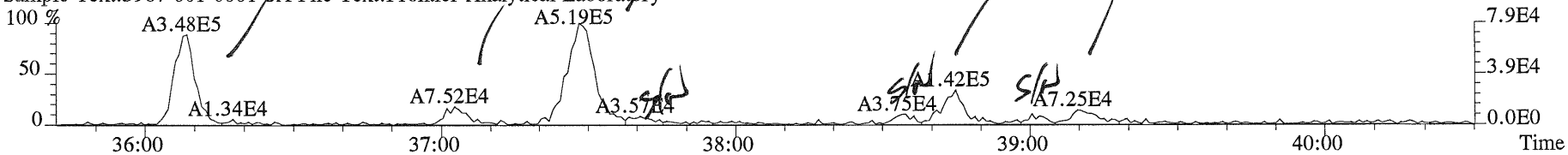
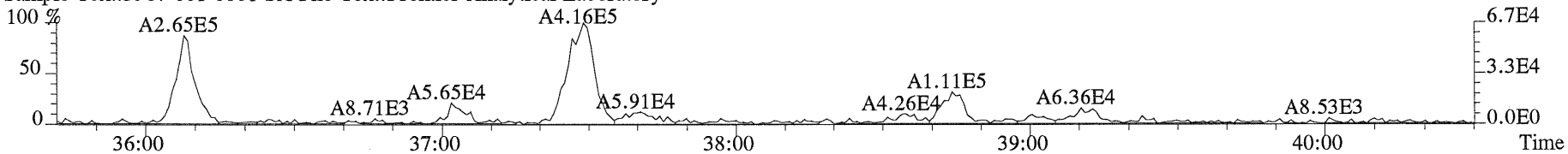


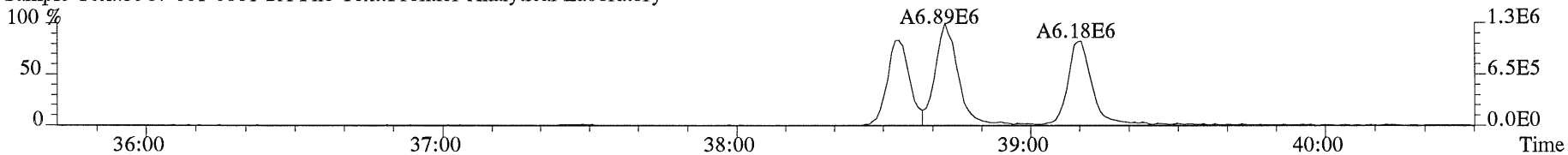
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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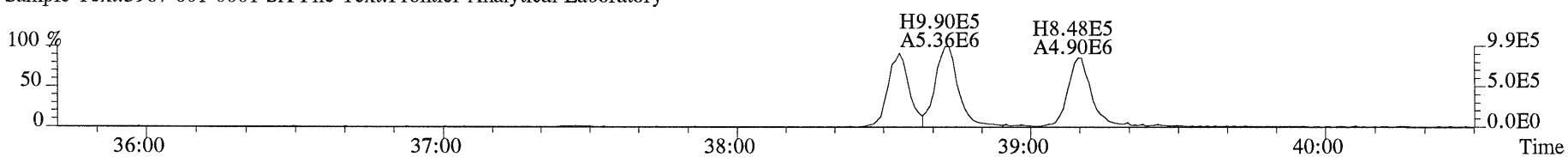

File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
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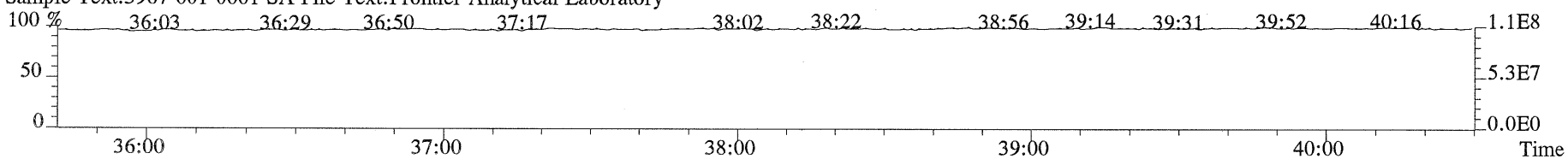
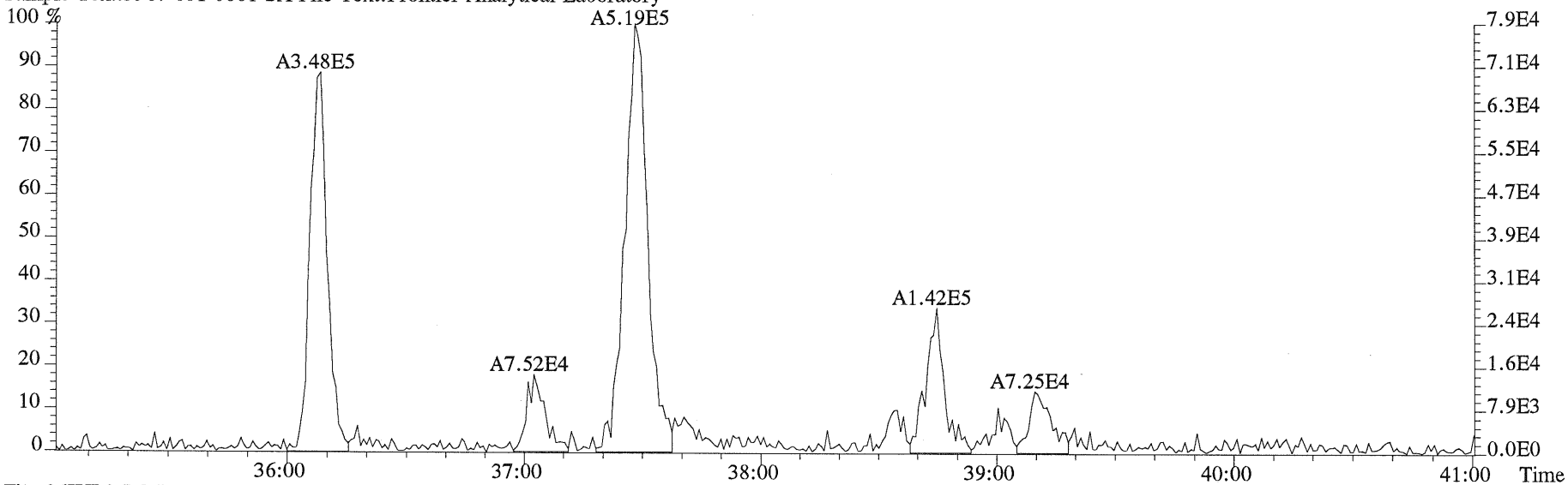
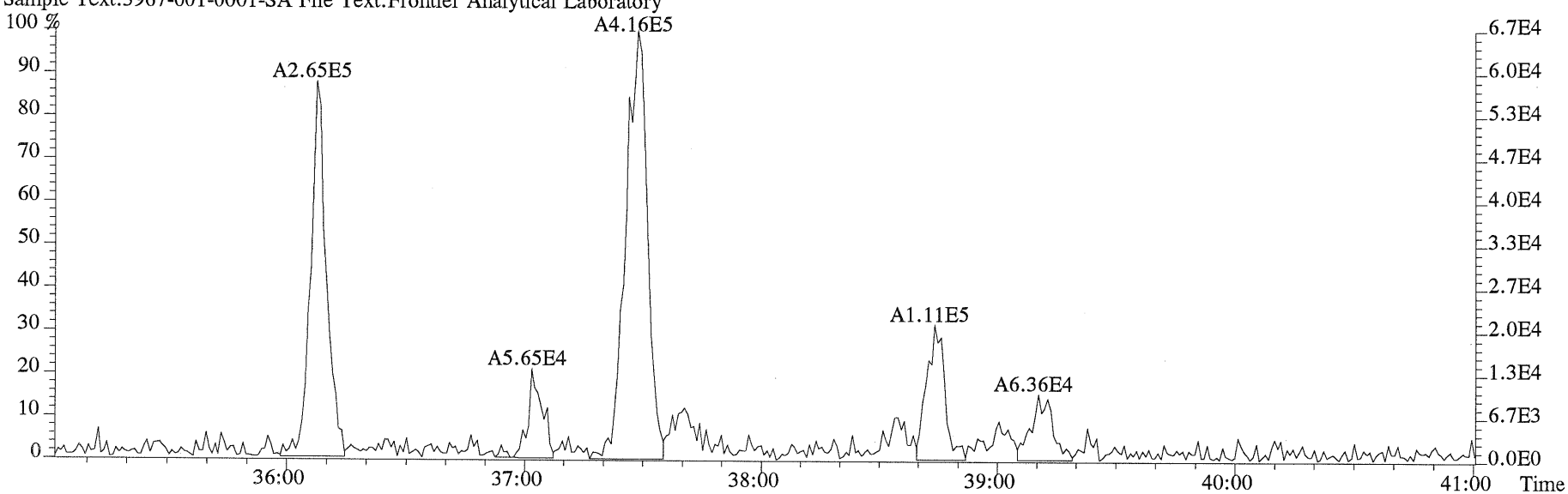


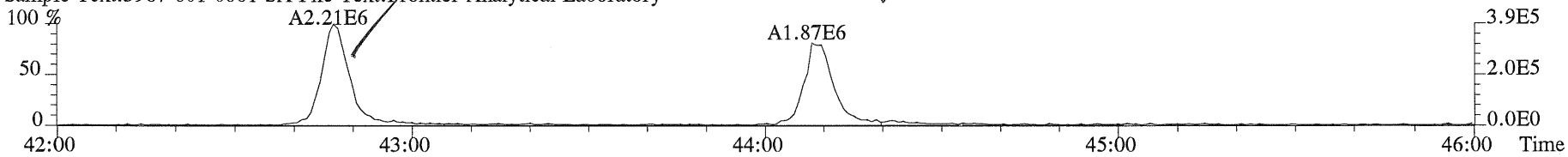
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
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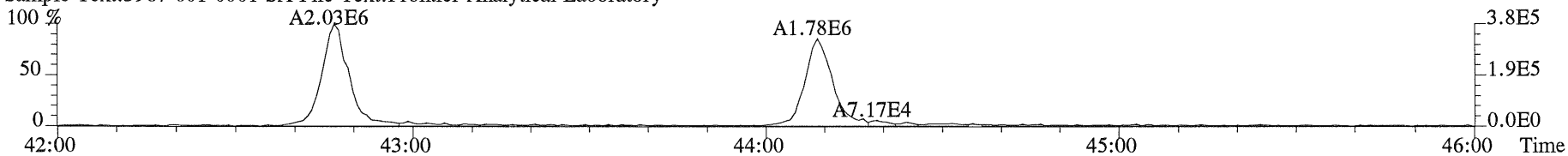
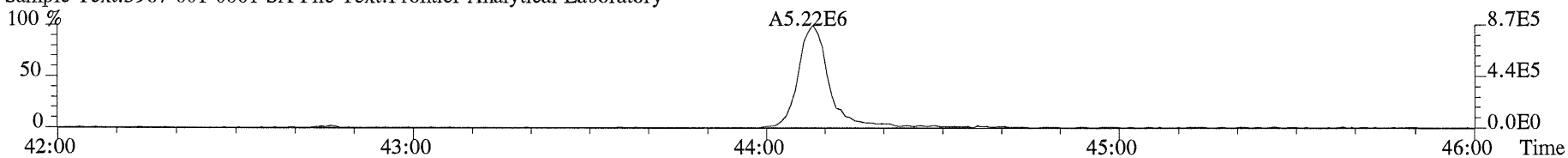
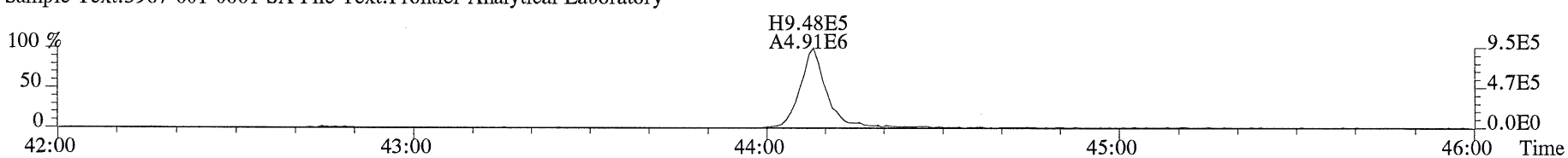


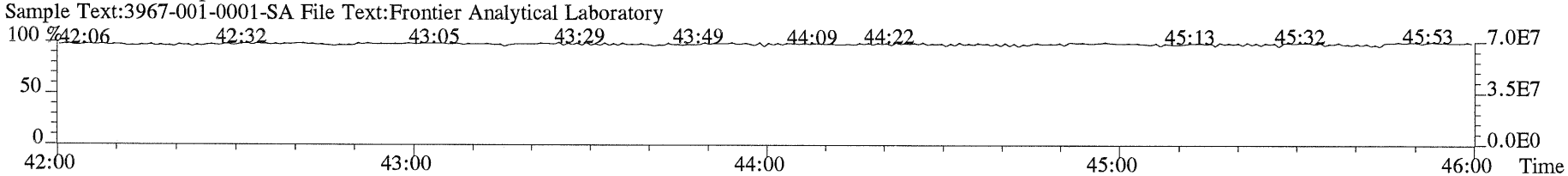
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



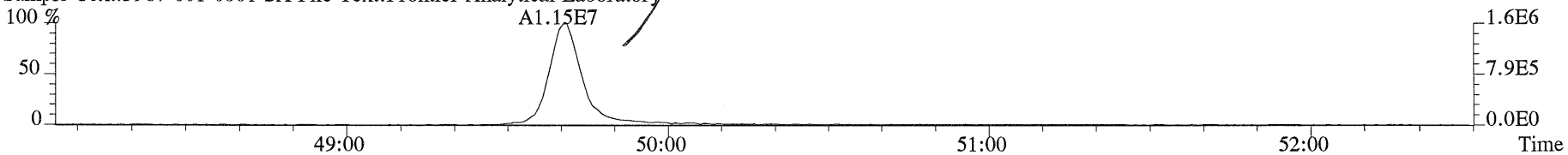
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



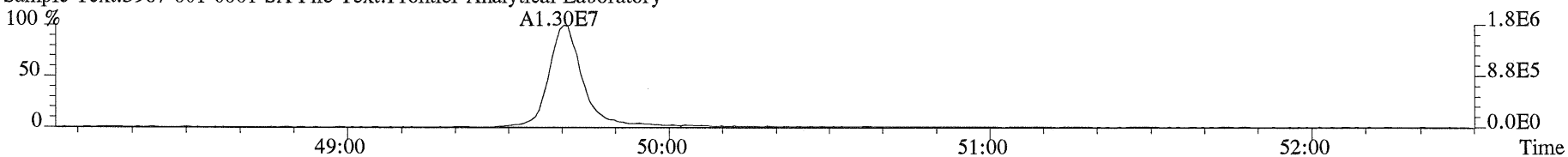
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



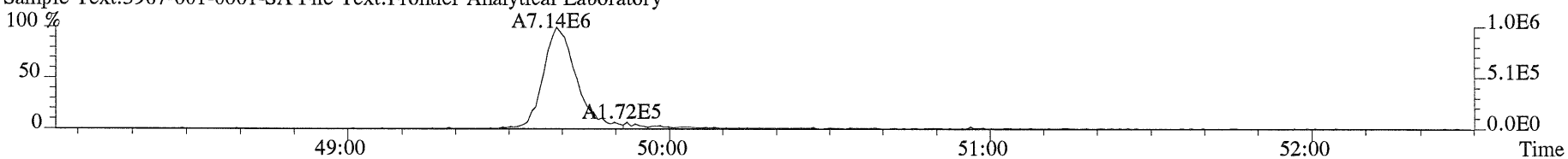
File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory

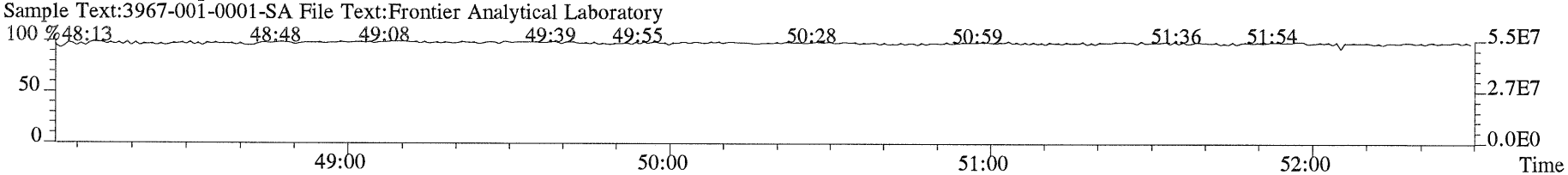


File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory

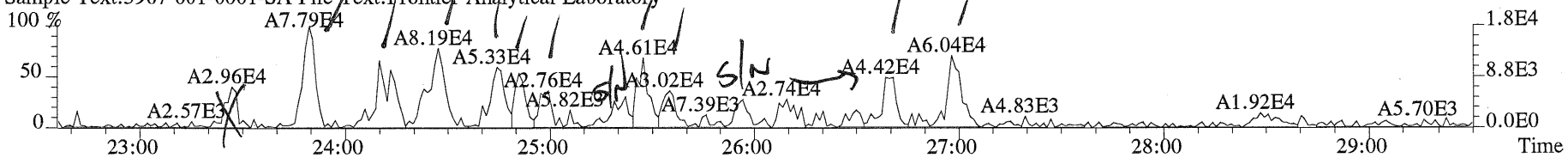


File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory

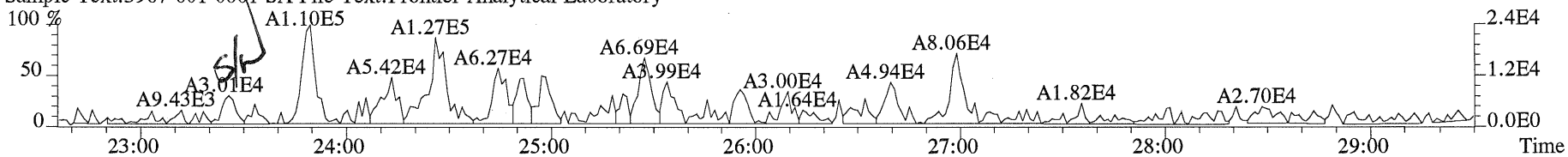
File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



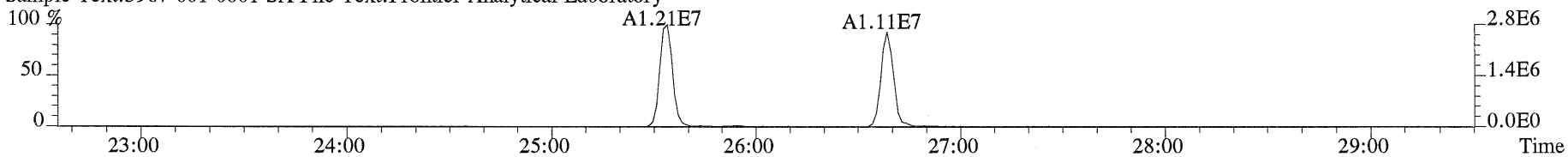
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



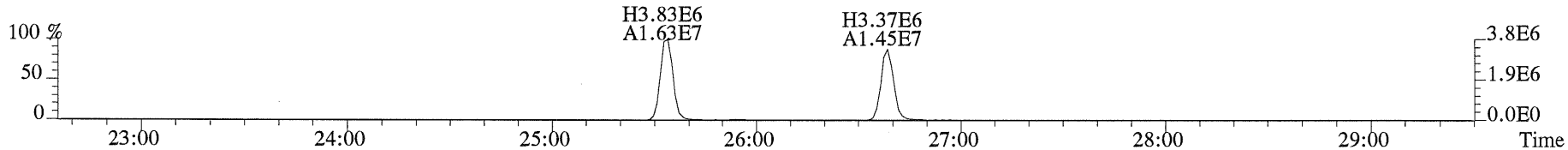
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



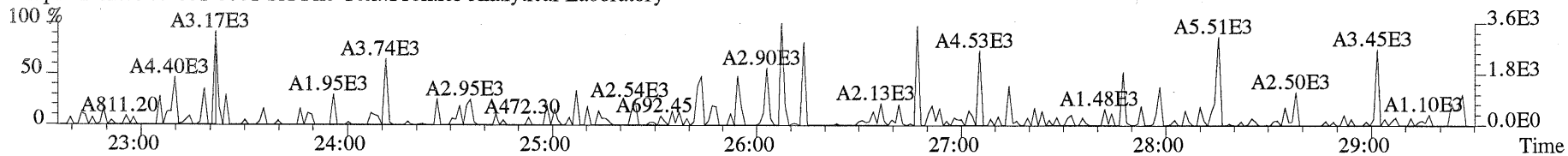
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



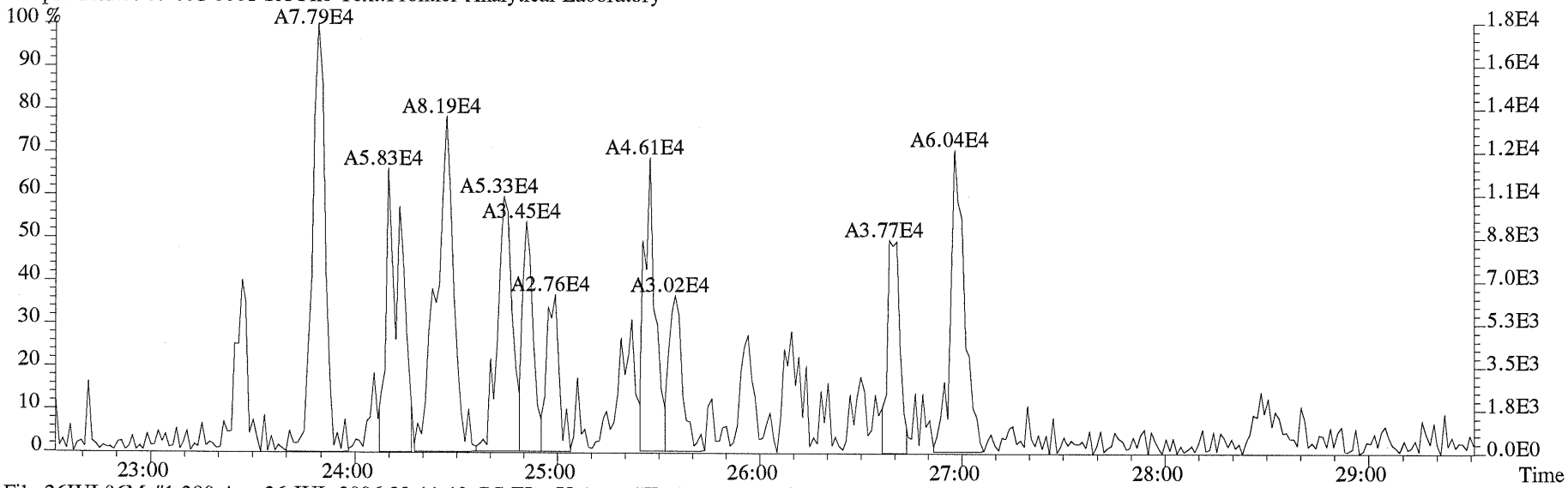
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



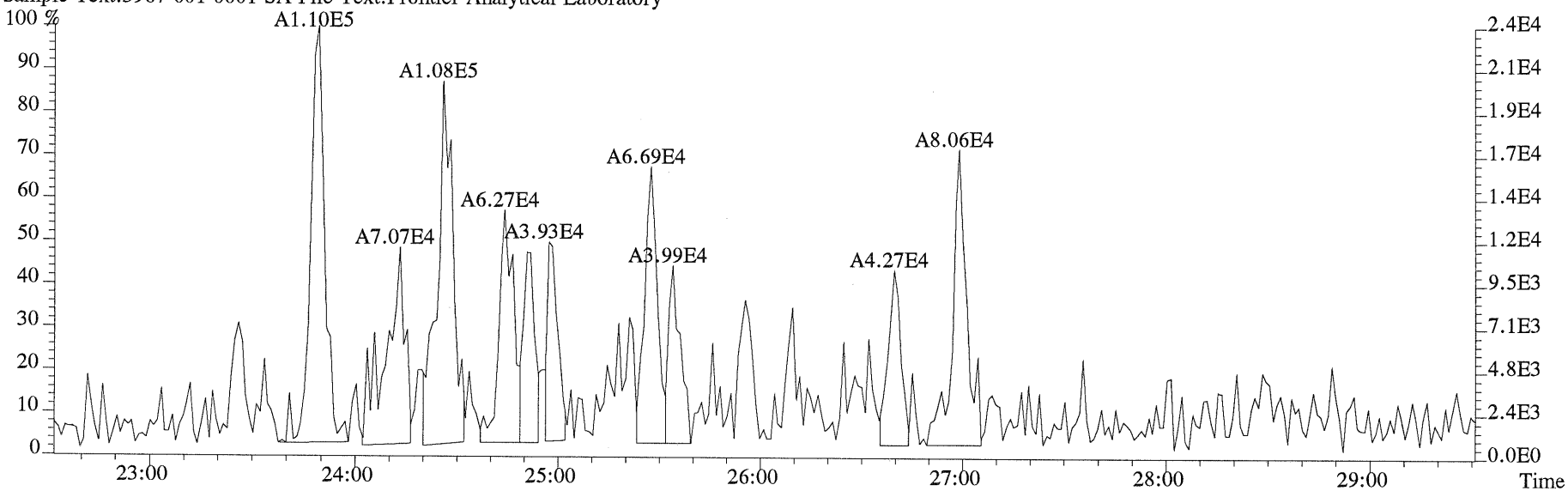
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



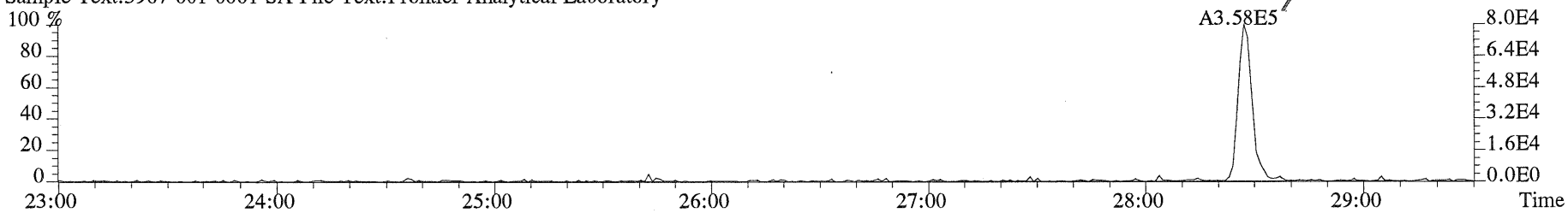
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



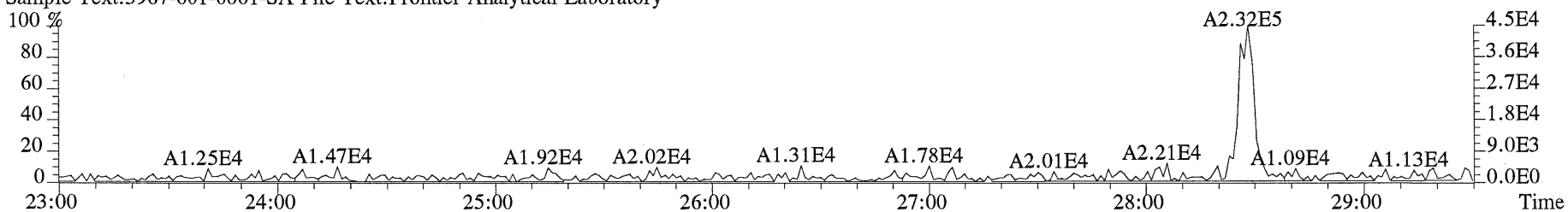
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



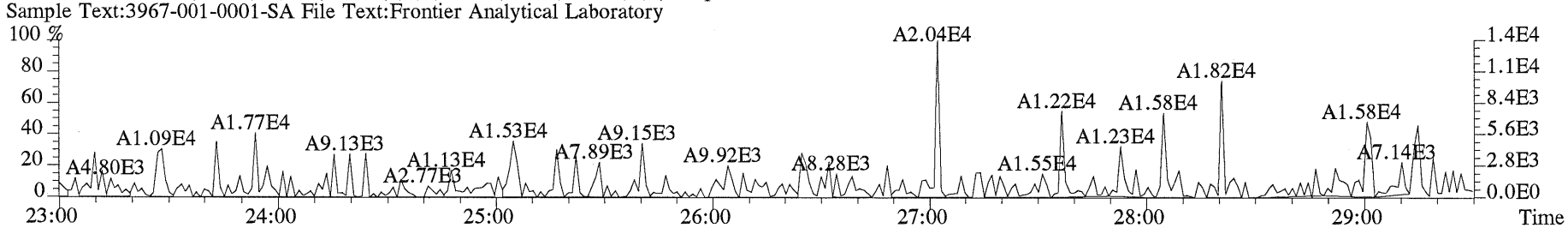
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



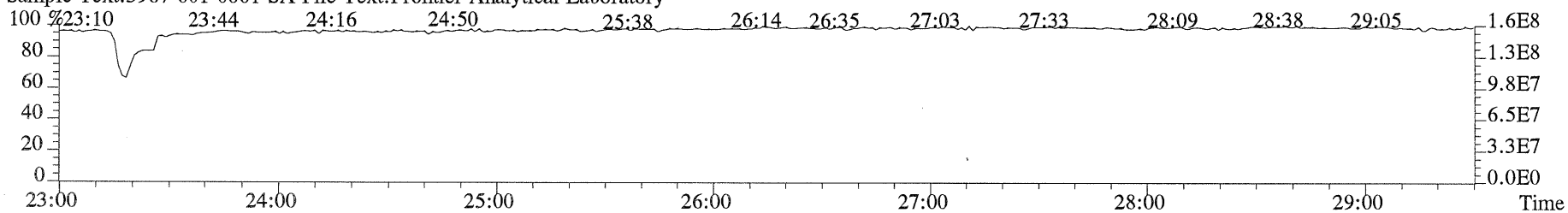
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



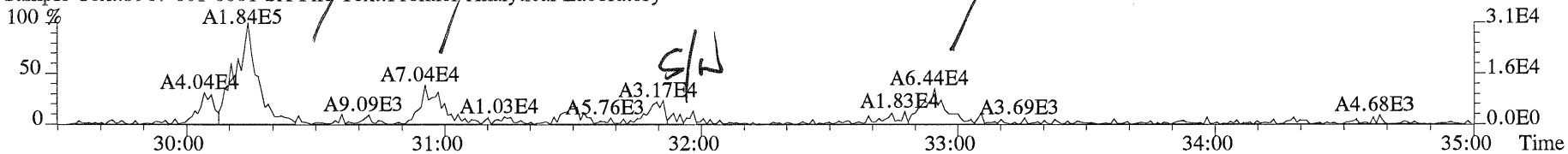
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



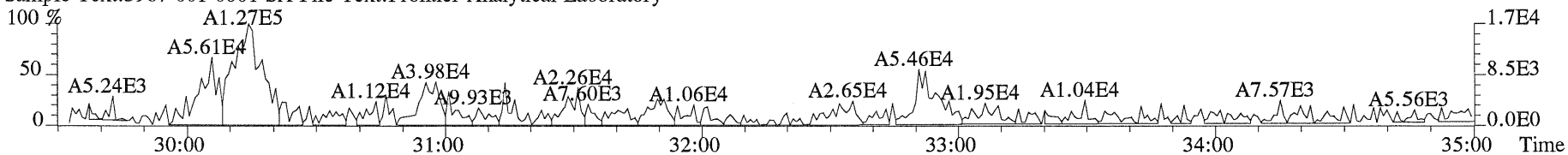
File:26JUL06M #1-390 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



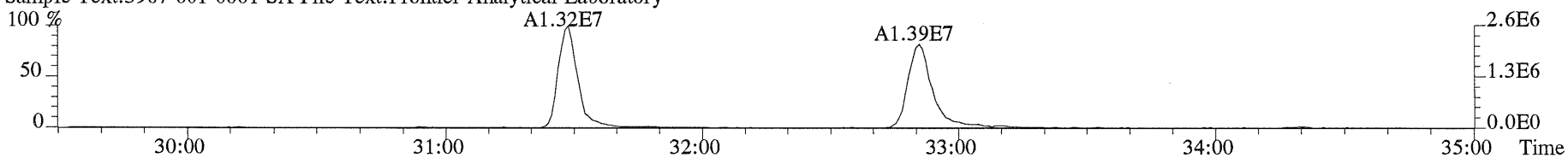
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



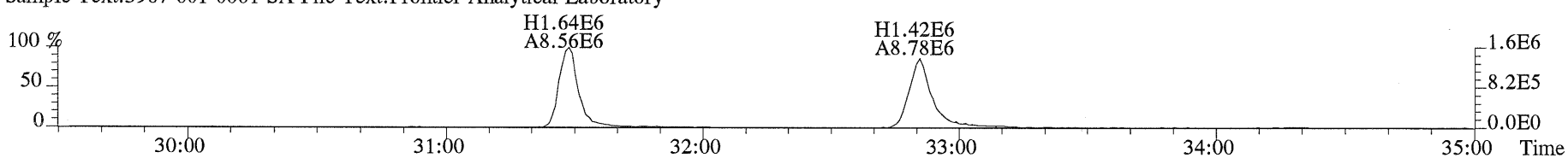
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



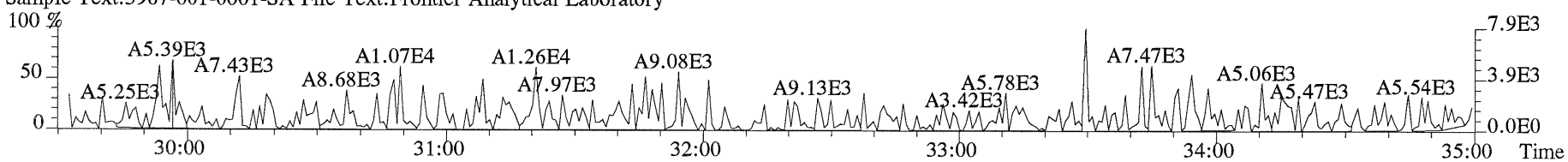
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



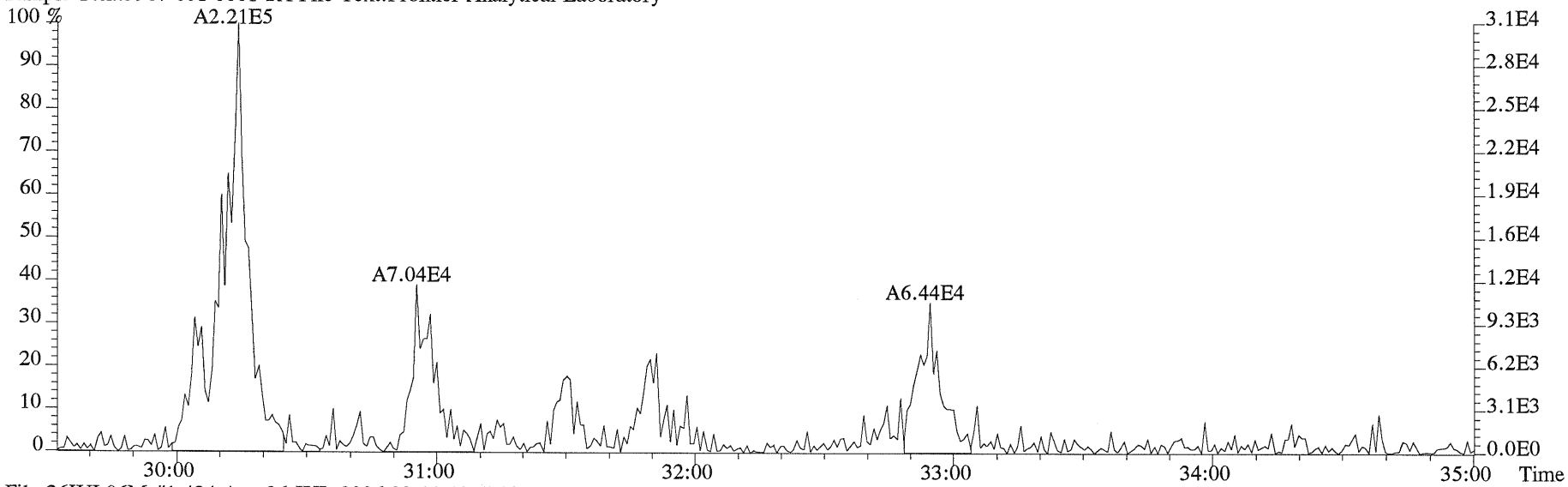
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



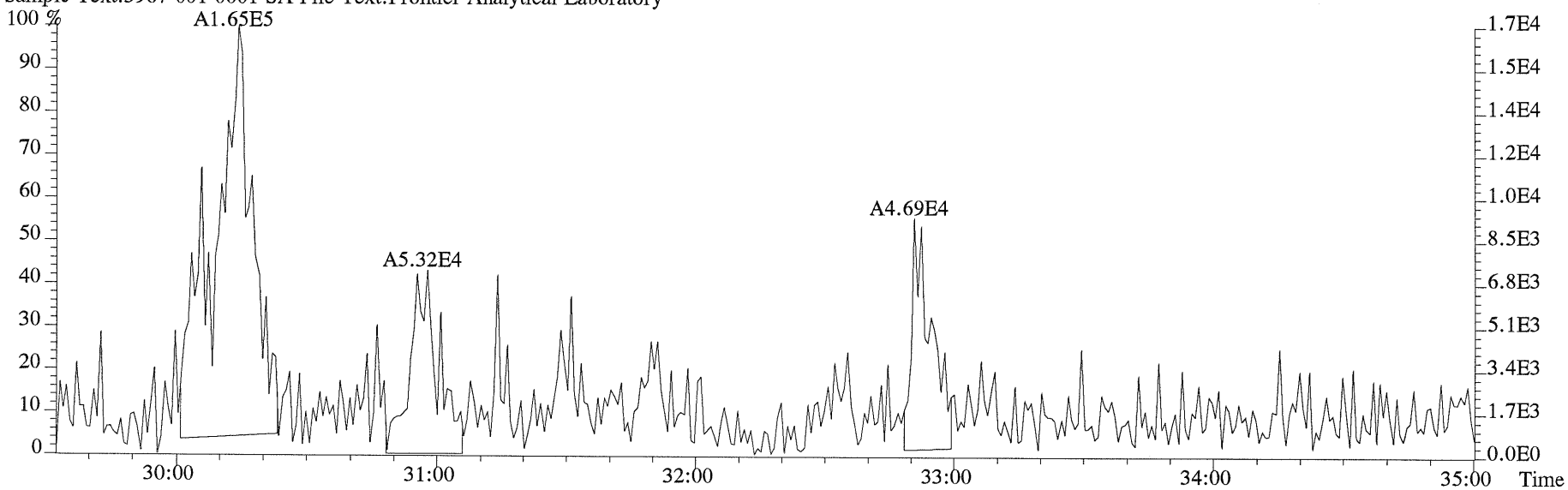
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



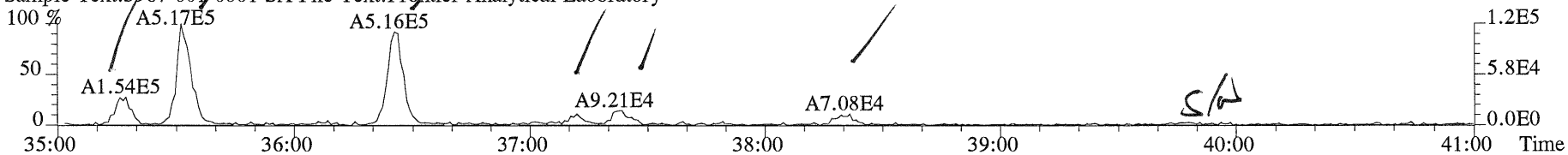
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



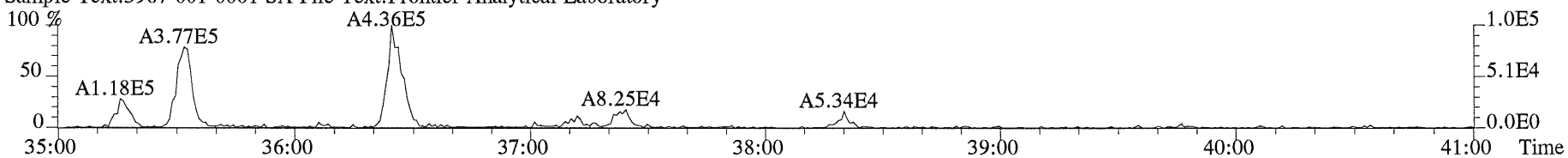
File:26JUL06M #1-424 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



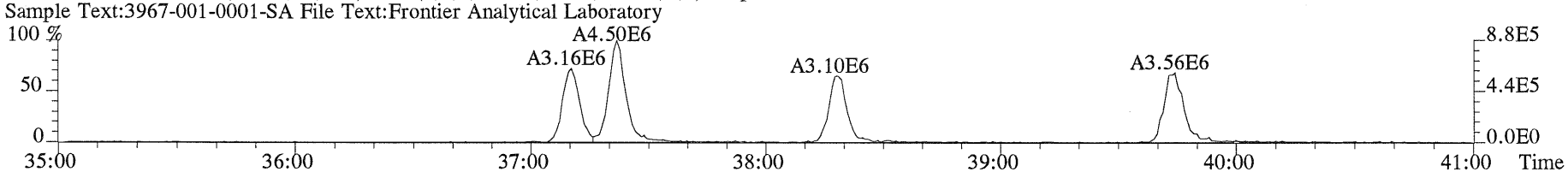
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



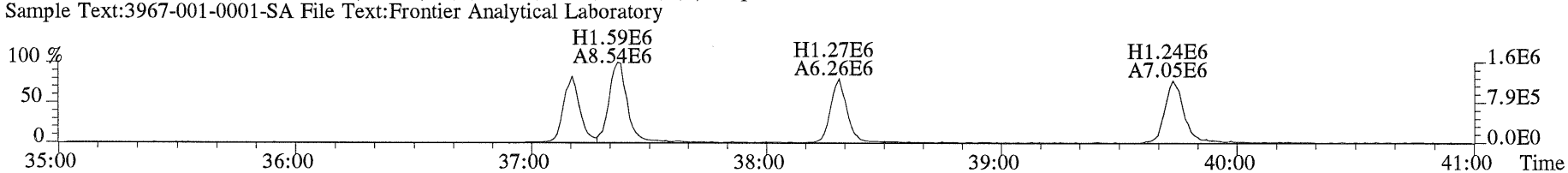
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



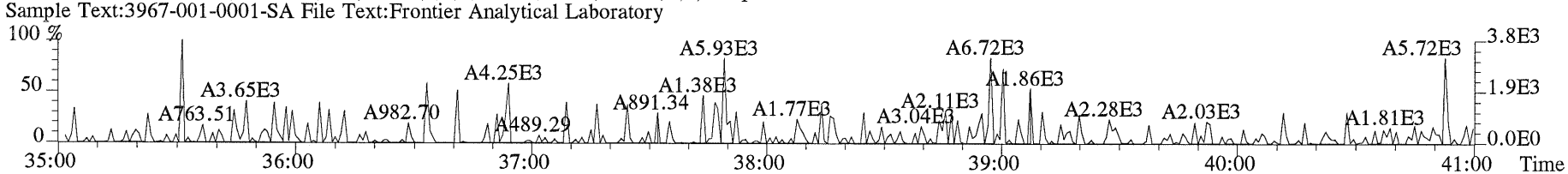
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



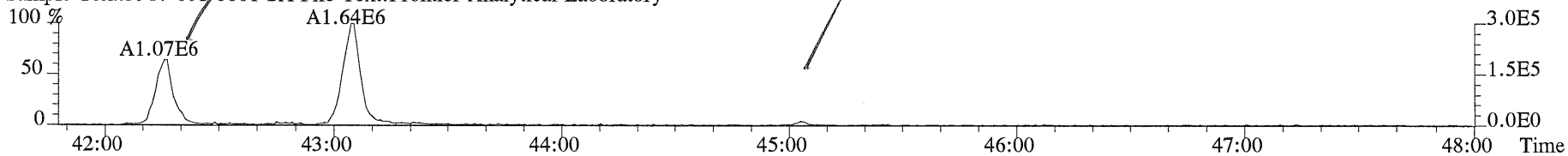
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



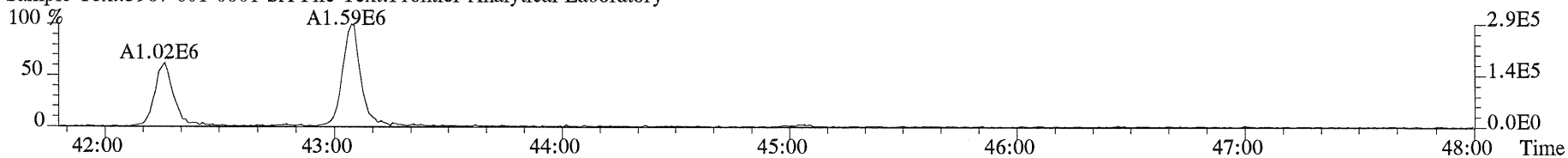
File:26JUL06M #1-464 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



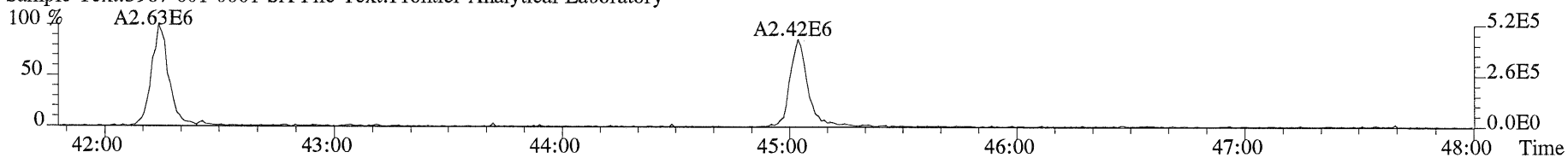
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



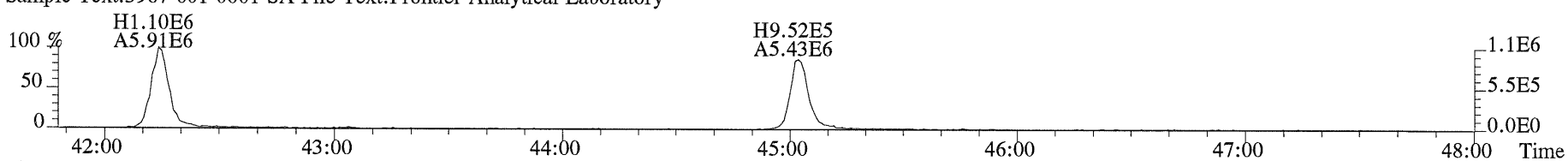
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



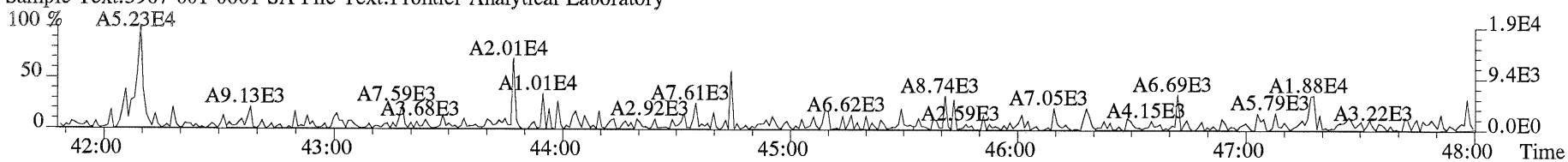
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



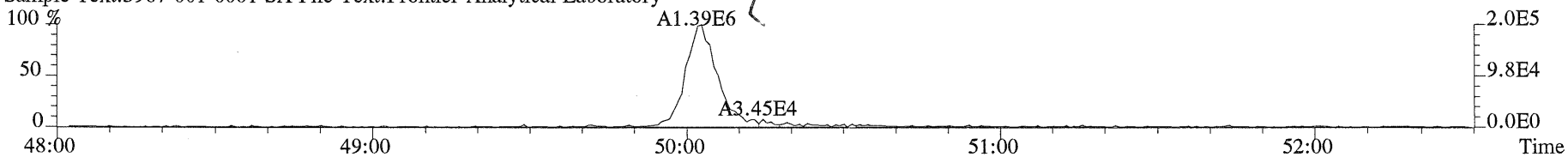
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



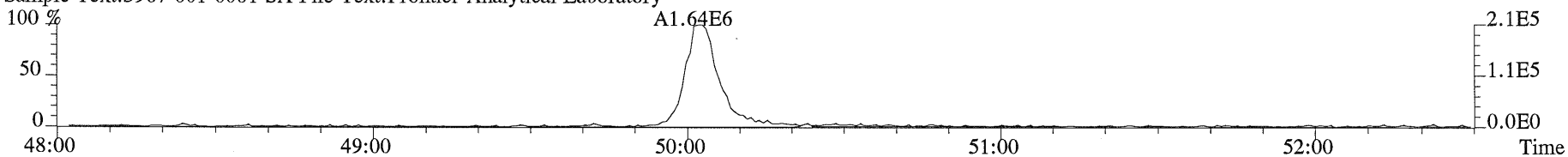
File:26JUL06M #1-541 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



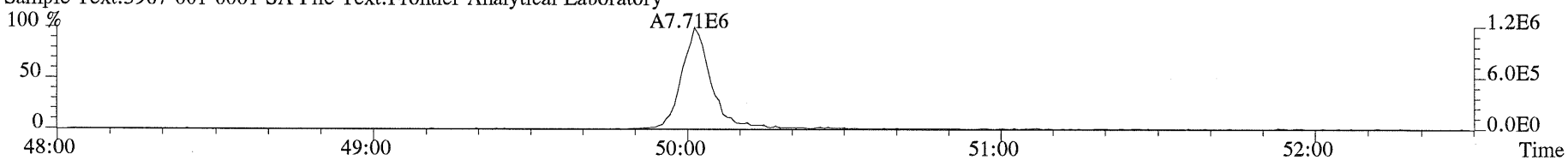
File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



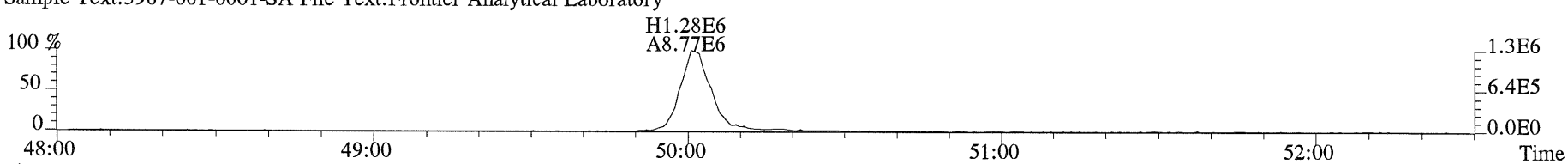
File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



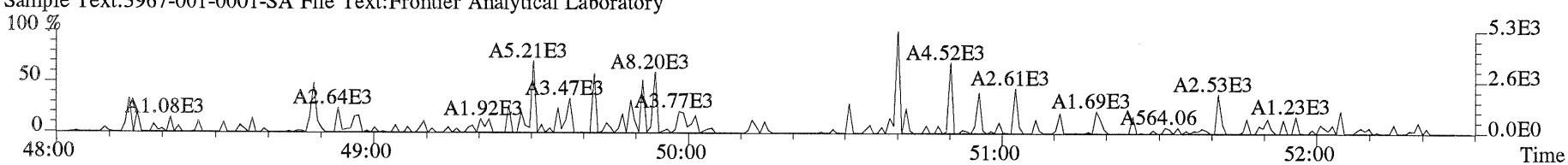
File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



File:26JUL06M #1-347 Acq:26-JUL-2006 22:11:13 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:3967-001-0001-SA File Text:Frontier Analytical Laboratory



Frontier Analytical Laboratory

Data Filename: 05JUL06M

Analyte: PCDDFAL3-7-5-06 Cal: PCDDFAL3-7-5-06

Name	RRF	S. D.	%RSD	S2 RRF#1	S3 RRF#2	S4 RRF#3	S1 RRF#4	S5 RRF#5	S6 RRF#6
2,3,7,8-TCDD	1.10	0.0366	3.33 %	1.12	1.05	1.09	1.15	1.07	1.12
1,2,3,7,8-PeCDD	0.90	0.0305	3.37 %	0.89	0.85	0.92	0.92	0.90	0.94
1,2,3,4,7,8-HxCDD	0.96	0.0213	2.22 %	0.94	0.93	0.99	0.97	0.95	0.97
1,2,3,6,7,8-HxCDD	0.83	0.0371	4.48 %	0.83	0.76	0.84	0.86	0.82	0.87
1,2,3,7,8,9-HxCDD	0.77	0.0360	4.65 %	0.76	0.71	0.81	0.80	0.76	0.80
1,2,3,4,6,7,8-HpCDD	0.86	0.0460	5.34 %	0.87	0.77	0.87	0.90	0.86	0.89
OCDD	0.87	0.0269	3.09 %	0.86	0.82	0.88	0.89	0.88	0.90
2,3,7,8-TCDF	0.99	0.0254	2.55 %	0.99	0.96	1.01	1.03	0.97	1.01
1,2,3,7,8-PeCDF	0.80	0.0310	3.88 %	0.77	0.76	0.81	0.84	0.80	0.82
2,3,4,7,8-PeCDF	0.88	0.0318	3.63 %	0.85	0.83	0.90	0.91	0.87	0.90
1,2,3,4,7,8-HxCDF	1.42	0.0492	3.46 %	1.39	1.35	1.47	1.46	1.40	1.47
1,2,3,6,7,8-HxCDF	0.97	0.0437	4.51 %	0.91	0.93	1.01	1.02	0.96	1.00
2,3,4,6,7,8-HxCDF	1.26	0.0591	4.69 %	1.23	1.16	1.29	1.31	1.26	1.31
1,2,3,7,8,9-HxCDF	1.34	0.0455	3.40 %	1.33	1.26	1.35	1.37	1.32	1.38
1,2,3,4,6,7,8-HpCDF	1.28	0.0665	5.19 %	1.24	1.17	1.31	1.35	1.28	1.33
1,2,3,4,7,8,9-HpCDF	1.22	0.0519	4.27 %	1.22	1.12	1.21	1.28	1.22	1.26
OCDF	0.90	0.0392	4.37 %	0.88	0.83	0.91	0.94	0.90	0.92
13C-2,3,7,8-TCDD	1.00	0.0164	1.65 %	1.01	0.98	1.01	0.97	1.01	1.01
13C-1,2,3,7,8-PeCDD	0.96	0.0346	3.62 %	0.93	0.93	0.97	0.92	0.98	1.00
13C-1,2,3,4,7,8-HxCDD	0.90	0.0136	1.50 %	0.91	0.88	0.90	0.91	0.91	0.91
13C-1,2,3,6,7,8-HxCDD	1.09	0.0314	2.89 %	1.11	1.08	1.12	1.07	1.10	1.03
13C-1,2,3,4,6,7,8-HpCDD	0.96	0.0312	3.26 %	0.96	0.92	0.97	0.92	1.00	0.97
13C-OCDD	0.71	0.0368	5.16 %	0.73	0.67	0.72	0.66	0.75	0.74
13C-2,3,7,8-TCDF	0.94	0.0223	2.38 %	0.94	0.93	0.96	0.90	0.96	0.94
13C-1,2,3,7,8-PeCDF	1.00	0.0430	4.30 %	0.98	0.98	1.03	0.94	1.02	1.05
13C-2,3,4,7,8-PeCDF	0.94	0.0416	4.40 %	0.92	0.93	0.97	0.88	0.98	0.99
13C-1,2,3,4,7,8-HxCDF	0.86	0.0111	1.30 %	0.86	0.85	0.87	0.85	0.87	0.85
13C-1,2,3,6,7,8-HxCDF	1.23	0.0308	2.51 %	1.26	1.22	1.26	1.22	1.23	1.18
13C-2,3,4,6,7,8-HxCDF	0.88	0.0179	2.02 %	0.90	0.89	0.90	0.86	0.89	0.86
13C-1,2,3,7,8,9-HxCDF	0.98	0.0301	3.07 %	0.99	0.97	1.00	0.93	1.00	0.99
13C-1,2,3,4,6,7,8-HpCDF	0.86	0.0259	3.00 %	0.87	0.85	0.88	0.82	0.90	0.85
13C-1,2,3,4,7,8,9-HpCDF	0.70	0.0311	4.45 %	0.70	0.68	0.71	0.64	0.73	0.72
13C-OCDF	0.82	0.0530	6.47 %	0.83	0.78	0.84	0.74	0.88	0.86
37Cl-2,3,7,8-TCDD	0.79	0.0587	7.43 %	0.88	0.83	0.81	0.74	0.72	0.76
13C-1,2,3,4-TCDD	-	-	- %	-	-	-	-	-	-
13C-1,2,3,4-TCDF	-	-	- %	-	-	-	-	-	-
13C-1,2,3,7,8,9-HxCDD	-	-	- %	-	-	-	-	-	-
Total Tetra-Dioxins	1.10	0.0366	3.33 %	1.12	1.05	1.09	1.15	1.07	1.12
Total Penta-Dioxins	0.90	0.0305	3.37 %	0.89	0.85	0.92	0.92	0.90	0.94
Total Hexa-Dioxins	0.85	0.0309	3.64 %	0.84	0.80	0.87	0.87	0.84	0.88
Total Hepta-Dioxins	0.86	0.0460	5.34 %	0.87	0.77	0.87	0.90	0.86	0.89
Total Tetra-Furans	0.99	0.0254	2.55 %	0.99	0.96	1.01	1.03	0.97	1.01
1st Fn. Tot Penta-Furans	0.84	0.0310	3.71 %	0.81	0.79	0.85	0.87	0.84	0.86
Total Penta-Furans	0.84	0.0310	3.71 %	0.81	0.79	0.85	0.87	0.84	0.86
Total Hexa-Furans	1.22	0.0470	3.84 %	1.19	1.15	1.25	1.26	1.21	1.27
Total Hepta-Furans	1.25	0.0588	4.70 %	1.23	1.15	1.27	1.32	1.25	1.30

Analyst: _____ Date: 7/6/06

Run #1 Filename 05JUL06M S: 2 Acquired: 5-JUL-06 12:45:16 Cal: PCDDFAL3-7-5-06
Client ID: ST070506MO Analyte: FAL ID: 1613 CSO 051212G

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.25	5.87e+05	0.85 y	27:37	-	1.12	y
2	Unk	1,2,3,7,8-PeCDD	1.25	2.15e+06	1.65 y	33:25	-	0.893	y
3	Unk	1,2,3,4,7,8-HxCDD	1.25	1.64e+06	1.22 y	38:45	-	0.939	y
4	Unk	1,2,3,6,7,8-HxCDD	1.25	1.75e+06	1.31 y	38:55	-	0.827	y
5	Unk	1,2,3,7,8,9-HxCDD	1.25	1.48e+06	1.33 y	39:22	-	0.764	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1.25	1.61e+06	1.11 y	44:19	-	0.872	y
7	Unk	OCDD	2.50	2.39e+06	0.89 y	49:53	-	0.861	y
8	Unk	2,3,7,8-TCDF	0.25	7.31e+05	0.66 y	26:52	-	0.988	y
9	Unk	1,2,3,7,8-PeCDF	1.25	2.97e+06	1.52 y	31:42	-	0.771	y
10	Unk	2,3,4,7,8-PeCDF	1.25	3.07e+06	1.46 y	33:01	-	0.847	y
11	Unk	1,2,3,4,7,8-HxCDF	1.25	2.28e+06	1.24 y	37:23	-	1.39	y
12	Unk	1,2,3,6,7,8-HxCDF	1.25	2.20e+06	1.27 y	37:34	-	0.913	y
13	Unk	2,3,4,6,7,8-HxCDF	1.25	2.11e+06	1.15 y	38:31	-	1.23	y
14	Unk	1,2,3,7,8,9-HxCDF	1.25	2.54e+06	1.30 y	39:57	-	1.33	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1.25	2.06e+06	1.03 y	42:26	-	1.24	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1.25	1.64e+06	1.07 y	45:16	-	1.22	y
17	Unk	OCDF	2.50	2.77e+06	0.87 y	50:15	-	0.876	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.10e+08	0.78 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.93e+08	1.59 y	33:24	-	0.930	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.40e+08	1.27 y	38:44	-	0.914	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.70e+08	1.27 y	38:54	-	1.11	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.47e+08	1.07 y	44:18	-	0.964	y
23	IS	13C-OCDD	200.00	2.22e+08	0.92 y	49:50	-	0.726	y
24	IS	13C-2,3,7,8-TCDF	100.00	2.96e+08	0.79 y	26:52	-	0.939	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.08e+08	1.59 y	31:41	-	0.976	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	2.90e+08	1.60 y	32:60	-	0.920	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.31e+08	0.54 y	37:22	-	0.860	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.93e+08	0.53 y	37:33	-	1.26	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.37e+08	0.54 y	38:30	-	0.895	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.52e+08	0.53 y	39:56	-	0.995	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.33e+08	0.45 y	42:25	-	0.871	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.08e+08	0.44 y	45:13	-	0.705	y
33	IS	13C-OCDF	200.00	2.53e+08	0.90 y	50:14	-	0.827	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.25	4.54e+05		27:37	-	0.876	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.07e+08	0.79 y	27:02	2.07e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.15e+08	0.78 y	25:47	3.15e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.53e+08	1.28 y	39:21	1.53e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.12	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.893	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.840	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.872	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.988	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.808	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.808	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.19	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.23	y

Analyst: _____ Date: 7/6/06

Run #2 Filename 05JUL06M S: 3 Acquired: 5-JUL-06 13:40:39 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M1 Analyte: FAL ID: 1613 CS1 051212H

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	0.50	8.69e+05	0.85 y	27:38	-	1.05	y
2	Unk	1,2,3,7,8-PeCDD	2.50	3.34e+06	1.53 y	33:25	-	0.850	y
3	Unk	1,2,3,4,7,8-HxCDD	2.50	2.62e+06	1.32 y	38:45	-	0.933	y
4	Unk	1,2,3,6,7,8-HxCDD	2.50	2.64e+06	1.20 y	38:55	-	0.763	y
5	Unk	1,2,3,7,8,9-HxCDD	2.50	2.23e+06	1.25 y	39:23	-	0.712	y
6	Unk	1,2,3,4,6,7,8-HpCDD	2.50	2.28e+06	1.14 y	44:20	-	0.771	y
7	Unk	OCDD	5.00	3.55e+06	0.85 y	49:52	-	0.823	y
8	Unk	2,3,7,8-TCDF	0.50	1.13e+06	0.75 y	26:53	-	0.962	y
9	Unk	1,2,3,7,8-PeCDF	2.50	4.67e+06	1.41 y	31:42	-	0.756	y
10	Unk	2,3,4,7,8-PeCDF	2.50	4.85e+06	1.51 y	33:01	-	0.829	y
11	Unk	1,2,3,4,7,8-HxCDF	2.50	3.70e+06	1.24 y	37:23	-	1.35	y
12	Unk	1,2,3,6,7,8-HxCDF	2.50	3.61e+06	1.31 y	37:34	-	0.926	y
13	Unk	2,3,4,6,7,8-HxCDF	2.50	3.28e+06	1.31 y	38:32	-	1.16	y
14	Unk	1,2,3,7,8,9-HxCDF	2.50	3.91e+06	1.34 y	39:57	-	1.26	y
15	Unk	1,2,3,4,6,7,8-HpCDF	2.50	3.19e+06	1.04 y	42:27	-	1.17	y
16	Unk	1,2,3,4,7,8,9-HpCDF	2.50	2.46e+06	1.08 y	45:16	-	1.12	y
17	Unk	OCDF	5.00	4.15e+06	0.91 y	50:16	-	0.831	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	1.66e+08	0.81 y	27:36	-	0.981	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.57e+08	1.58 y	33:23	-	0.928	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.12e+08	1.26 y	38:44	-	0.877	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.38e+08	1.25 y	38:54	-	1.08	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.18e+08	1.06 y	44:18	-	0.924	y
23	IS	13C-OCDD	200.00	1.73e+08	0.90 y	49:51	-	0.674	y
24	IS	13C-2,3,7,8-TCDF	100.00	2.35e+08	0.81 y	26:51	-	0.930	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	2.47e+08	1.60 y	31:40	-	0.977	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	2.34e+08	1.60 y	32:59	-	0.926	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.09e+08	0.53 y	37:21	-	0.855	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.56e+08	0.53 y	37:34	-	1.22	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.13e+08	0.53 y	38:30	-	0.885	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.24e+08	0.52 y	39:56	-	0.971	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.09e+08	0.44 y	42:25	-	0.849	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	8.74e+07	0.45 y	45:14	-	0.683	y
33	IS	13C-OCDF	200.00	2.00e+08	0.91 y	50:14	-	0.779	y
34	C/Up	37Cl-2,3,7,8-TCDD	0.50	7.03e+05		27:37	-	0.830	y
35	RS	13C-1,2,3,4-TCDD	100.00	1.69e+08	0.80 y	27:02	1.69e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	2.53e+08	0.79 y	25:47	2.53e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.28e+08	1.27 y	39:21	1.28e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.05	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.850	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.797	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.771	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.962	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.792	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.792	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.15	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.15	y

Analyst: _____ Date: 7/6/06

Run #3 Filename 05JUL06M S: 4 Acquired: 5-JUL-06 14:36:03 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M2 Analyte: FAL ID: 1613 CS2 051212I

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	2.00	4.31e+06	0.81 y	27:37	-	1.09	y
2	Unk	1,2,3,7,8-PeCDD	10.00	1.75e+07	1.57 y	33:26	-	0.917	y
3	Unk	1,2,3,4,7,8-HxCDD	10.00	1.38e+07	1.27 y	38:46	-	0.991	y
4	Unk	1,2,3,6,7,8-HxCDD	10.00	1.45e+07	1.28 y	38:56	-	0.843	y
5	Unk	1,2,3,7,8,9-HxCDD	10.00	1.25e+07	1.24 y	39:23	-	0.806	y
6	Unk	1,2,3,4,6,7,8-HpCDD	10.00	1.31e+07	1.01 y	44:20	-	0.874	y
7	Unk	OCDD	20.00	1.96e+07	0.90 y	49:52	-	0.884	y
8	Unk	2,3,7,8-TCDF	2.00	5.66e+06	0.74 y	26:52	-	1.01	y
9	Unk	1,2,3,7,8-PeCDF	10.00	2.43e+07	1.54 y	31:42	-	0.806	y
10	Unk	2,3,4,7,8-PeCDF	10.00	2.54e+07	1.53 y	33:01	-	0.899	y
11	Unk	1,2,3,4,7,8-HxCDF	10.00	1.97e+07	1.23 y	37:23	-	1.47	y
12	Unk	1,2,3,6,7,8-HxCDF	10.00	1.94e+07	1.24 y	37:34	-	1.01	y
13	Unk	2,3,4,6,7,8-HxCDF	10.00	1.79e+07	1.25 y	38:32	-	1.29	y
14	Unk	1,2,3,7,8,9-HxCDF	10.00	2.08e+07	1.21 y	39:58	-	1.35	y
15	Unk	1,2,3,4,6,7,8-HpCDF	10.00	1.78e+07	1.06 y	42:27	-	1.31	y
16	Unk	1,2,3,4,7,8,9-HpCDF	10.00	1.33e+07	1.00 y	45:15	-	1.21	y
17	Unk	OCDF	20.00	2.35e+07	0.91 y	50:15	-	0.913	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	1.97e+08	0.78 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.91e+08	1.58 y	33:23	-	0.974	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.39e+08	1.27 y	38:44	-	0.905	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.72e+08	1.25 y	38:54	-	1.12	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.49e+08	1.06 y	44:18	-	0.972	y
23	IS	13C-OCDD	200.00	2.21e+08	0.89 y	49:51	-	0.719	y
24	IS	13C-2,3,7,8-TCDF	100.00	2.80e+08	0.79 y	26:51	-	0.959	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.02e+08	1.59 y	31:41	-	1.03	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	2.82e+08	1.60 y	33:00	-	0.966	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.34e+08	0.53 y	37:22	-	0.874	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.93e+08	0.53 y	37:34	-	1.26	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.39e+08	0.53 y	38:30	-	0.902	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.55e+08	0.53 y	39:57	-	1.00	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.35e+08	0.45 y	42:25	-	0.880	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.10e+08	0.44 y	45:14	-	0.712	y
33	IS	13C-OCDF	200.00	2.58e+08	0.90 y	50:15	-	0.838	y
34	C/Up	37Cl-2,3,7,8-TCDD	2.00	3.16e+06		27:38	-	0.805	y
35	RS	13C-1,2,3,4-TCDD	100.00	1.96e+08	0.81 y	27:01	1.96e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	2.92e+08	0.78 y	25:47	2.92e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.54e+08	1.26 y	39:21	1.54e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.09	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.917	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.875	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.874	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.01	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.851	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.851	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.25	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.27	y

Analyst: _____ Date: 7/6/06

Run #4 Filename 05JUL06M S: 1 Acquired: 5-JUL-06 11:49:47 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M3 Analyte: FAL ID: 1613 CS3 051212J

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	10.00	1.46e+07	0.77 y	27:37	-	1.15	y
2	Unk	1,2,3,7,8-PeCDD	50.00	5.50e+07	1.54 y	33:25	-	0.917	y
3	Unk	1,2,3,4,7,8-HxCDD	50.00	4.12e+07	1.27 y	38:45	-	0.970	y
4	Unk	1,2,3,6,7,8-HxCDD	50.00	4.30e+07	1.21 y	38:55	-	0.856	y
5	Unk	1,2,3,7,8,9-HxCDD	50.00	3.71e+07	1.22 y	39:22	-	0.800	y
6	Unk	1,2,3,4,6,7,8-HpCDD	50.00	3.85e+07	1.05 y	44:19	-	0.897	y
7	Unk	OCDD	100.00	5.49e+07	0.89 y	49:51	-	0.885	y
8	Unk	2,3,7,8-TCDF	10.00	1.80e+07	0.79 y	26:53	-	1.03	y
9	Unk	1,2,3,7,8-PeCDF	50.00	7.71e+07	1.55 y	31:42	-	0.841	y
10	Unk	2,3,4,7,8-PeCDF	50.00	7.81e+07	1.56 y	33:01	-	0.908	y
11	Unk	1,2,3,4,7,8-HxCDF	50.00	5.80e+07	1.25 y	37:22	-	1.46	y
12	Unk	1,2,3,6,7,8-HxCDF	50.00	5.78e+07	1.24 y	37:34	-	1.02	y
13	Unk	2,3,4,6,7,8-HxCDF	50.00	5.27e+07	1.25 y	38:31	-	1.31	y
14	Unk	1,2,3,7,8,9-HxCDF	50.00	5.95e+07	1.23 y	39:57	-	1.37	y
15	Unk	1,2,3,4,6,7,8-HpCDF	50.00	5.20e+07	1.04 y	42:26	-	1.35	y
16	Unk	1,2,3,4,7,8,9-HpCDF	50.00	3.85e+07	1.04 y	45:15	-	1.28	y
17	Unk	OCDF	100.00	6.49e+07	0.93 y	50:15	-	0.943	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	1.27e+08	0.79 y	27:36	-	0.974	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	1.20e+08	1.59 y	33:23	-	0.919	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	8.50e+07	1.26 y	38:44	-	0.908	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.01e+08	1.28 y	38:53	-	1.07	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	8.58e+07	1.07 y	44:18	-	0.917	y
23	IS	13C-OCDD	200.00	1.24e+08	0.91 y	49:51	-	0.662	y
24	IS	13C-2,3,7,8-TCDF	100.00	1.75e+08	0.79 y	26:52	-	0.898	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	1.83e+08	1.58 y	31:40	-	0.939	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	1.72e+08	1.62 y	32:59	-	0.881	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	7.96e+07	0.53 y	37:21	-	0.850	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	1.14e+08	0.54 y	37:33	-	1.22	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	8.06e+07	0.53 y	38:29	-	0.861	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	8.66e+07	0.52 y	39:56	-	0.925	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	7.71e+07	0.44 y	42:25	-	0.823	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	6.03e+07	0.45 y	45:14	-	0.644	y
33	IS	13C-OCDF	200.00	1.38e+08	0.91 y	50:14	-	0.736	y
34	C/Up	37Cl-2,3,7,8-TCDD	10.00	9.65e+06		27:38	-	0.739	y
35	RS	13C-1,2,3,4-TCDD	100.00	1.31e+08	0.81 y	27:01	1.31e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	1.95e+08	0.79 y	25:47	1.95e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	9.36e+07	1.26 y	39:21	9.36e+05	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.15	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.917	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.872	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.897	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.03	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.873	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.873	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.27	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.32	y

Analyst: _____ Date: 7/6/06

Run #5 Filename 05JUL06M S: 5 Acquired: 5-JUL-06 15:31:26 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M4 Analyte: FAL ID: 1613 CS4 051212K

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	40.00	9.29e+07	0.78 y	27:37	-	1.07	y
2	Unk	1,2,3,7,8-PeCDD	200.00	3.80e+08	1.58 y	33:25	-	0.901	y
3	Unk	1,2,3,4,7,8-HxCDD	200.00	3.00e+08	1.26 y	38:45	-	0.955	y
4	Unk	1,2,3,6,7,8-HxCDD	200.00	3.08e+08	1.25 y	38:55	-	0.816	y
5	Unk	1,2,3,7,8,9-HxCDD	200.00	2.64e+08	1.24 y	39:22	-	0.765	y
6	Unk	1,2,3,4,6,7,8-HpCDD	200.00	2.94e+08	1.05 y	44:20	-	0.859	y
7	Unk	OCDD	400.00	4.54e+08	0.87 y	49:52	-	0.876	y
8	Unk	2,3,7,8-TCDF	40.00	1.19e+08	0.78 y	26:53	-	0.968	y
9	Unk	1,2,3,7,8-PeCDF	200.00	5.28e+08	1.58 y	31:41	-	0.802	y
10	Unk	2,3,4,7,8-PeCDF	200.00	5.48e+08	1.57 y	33:01	-	0.872	y
11	Unk	1,2,3,4,7,8-HxCDF	200.00	4.20e+08	1.25 y	37:23	-	1.40	y
12	Unk	1,2,3,6,7,8-HxCDF	200.00	4.06e+08	1.25 y	37:35	-	0.958	y
13	Unk	2,3,4,6,7,8-HxCDF	200.00	3.88e+08	1.24 y	38:31	-	1.26	y
14	Unk	1,2,3,7,8,9-HxCDF	200.00	4.56e+08	1.24 y	39:58	-	1.32	y
15	Unk	1,2,3,4,6,7,8-HpCDF	200.00	3.95e+08	1.04 y	42:26	-	1.28	y
16	Unk	1,2,3,4,7,8,9-HpCDF	200.00	3.05e+08	1.05 y	45:15	-	1.22	y
17	Unk	OCDF	400.00	5.43e+08	0.93 y	50:16	-	0.898	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.16e+08	0.78 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.11e+08	1.59 y	33:24	-	0.985	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.57e+08	1.27 y	38:44	-	0.913	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	1.89e+08	1.25 y	38:54	-	1.10	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.71e+08	1.05 y	44:18	-	0.997	y
23	IS	13C-OCDD	200.00	2.59e+08	0.90 y	49:51	-	0.753	y
24	IS	13C-2,3,7,8-TCDF	100.00	3.08e+08	0.80 y	26:52	-	0.958	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.29e+08	1.60 y	31:41	-	1.02	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.14e+08	1.59 y	32:60	-	0.978	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.50e+08	0.53 y	37:22	-	0.871	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.12e+08	0.52 y	37:33	-	1.23	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.54e+08	0.53 y	38:30	-	0.895	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.72e+08	0.52 y	39:56	-	1.00	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.54e+08	0.46 y	42:25	-	0.897	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.25e+08	0.44 y	45:14	-	0.729	y
33	IS	13C-OCDF	200.00	3.03e+08	0.90 y	50:14	-	0.880	y
34	C/Up	37Cl-2,3,7,8-TCDD	40.00	6.18e+07		27:37	-	0.721	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.14e+08	0.81 y	27:02	2.14e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.21e+08	0.79 y	25:46	3.21e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.72e+08	1.27 y	39:21	1.72e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.07	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.901	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.841	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.859	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	0.968	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.836	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.836	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.21	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.25	y

Analyst: _____ Date: 7/6/06

Run #6 Filename 05JUL06M S: 6 Acquired: 5-JUL-06 16:26:53 Cal: PCDDFAL3-7-5-06
Client ID: ST070506M5 Analyte: PCDDFAL3-7-5-06 FAL ID: 1613 CS5 051212L

	Typ	Name	Amount	Resp	RA	RT	RF	RRF	
1	Unk	2,3,7,8-TCDD	200.00	5.19e+08	0.78 y	27:38	-	1.12	y
2	Unk	1,2,3,7,8-PeCDD	1000.00	2.17e+09	1.57 y	33:26	-	0.940	y
3	Unk	1,2,3,4,7,8-HxCDD	1000.00	1.72e+09	1.26 y	38:46	-	0.966	y
4	Unk	1,2,3,6,7,8-HxCDD	1000.00	1.75e+09	1.26 y	38:56	-	0.868	y
5	Unk	1,2,3,7,8,9-HxCDD	1000.00	1.52e+09	1.25 y	39:23	-	0.801	y
6	Unk	1,2,3,4,6,7,8-HpCDD	1000.00	1.70e+09	1.03 y	44:20	-	0.890	y
7	Unk	OCDD	2000.00	2.62e+09	0.91 y	49:53	-	0.900	y
8	Unk	2,3,7,8-TCDF	200.00	6.59e+08	0.78 y	26:53	-	1.01	y
9	Unk	1,2,3,7,8-PeCDF	1000.00	3.01e+09	1.56 y	31:42	-	0.819	y
10	Unk	2,3,4,7,8-PeCDF	1000.00	3.10e+09	1.56 y	33:01	-	0.896	y
11	Unk	1,2,3,4,7,8-HxCDF	1000.00	2.44e+09	1.24 y	37:23	-	1.47	y
12	Unk	1,2,3,6,7,8-HxCDF	1000.00	2.31e+09	1.24 y	37:35	-	0.998	y
13	Unk	2,3,4,6,7,8-HxCDF	1000.00	2.22e+09	1.25 y	38:32	-	1.31	y
14	Unk	1,2,3,7,8,9-HxCDF	1000.00	2.69e+09	1.26 y	39:58	-	1.38	y
15	Unk	1,2,3,4,6,7,8-HpCDF	1000.00	2.23e+09	1.04 y	42:27	-	1.33	y
16	Unk	1,2,3,4,7,8,9-HpCDF	1000.00	1.78e+09	1.04 y	45:16	-	1.26	y
17	Unk	OCDF	2000.00	3.09e+09	0.92 y	50:16	-	0.921	y
18	IS/RT	13C-2,3,7,8-TCDD	100.00	2.32e+08	0.79 y	27:36	-	1.01	y
19	IS	13C-1,2,3,7,8-PeCDD	100.00	2.31e+08	1.58 y	33:24	-	1.00	y
20	IS	13C-1,2,3,4,7,8-HxCDD	100.00	1.78e+08	1.27 y	38:44	-	0.907	y
21	IS	13C-1,2,3,6,7,8-HxCDD	100.00	2.02e+08	1.27 y	38:54	-	1.03	y
22	IS	13C-1,2,3,4,6,7,8-HpCDD	100.00	1.91e+08	1.06 y	44:19	-	0.973	y
23	IS	13C-OCDD	200.00	2.91e+08	0.91 y	49:51	-	0.743	y
24	IS	13C-2,3,7,8-TCDF	100.00	3.28e+08	0.80 y	26:51	-	0.939	y
25	IS	13C-1,2,3,7,8-PeCDF	100.00	3.67e+08	1.60 y	31:41	-	1.05	y
26	IS	13C-2,3,4,7,8-PeCDF	100.00	3.45e+08	1.61 y	33:00	-	0.990	y
27	IS	13C-1,2,3,4,7,8-HxCDF	100.00	1.66e+08	0.53 y	37:22	-	0.847	y
28	IS	13C-1,2,3,6,7,8-HxCDF	100.00	2.31e+08	0.53 y	37:34	-	1.18	y
29	IS	13C-2,3,4,6,7,8-HxCDF	100.00	1.69e+08	0.53 y	38:30	-	0.862	y
30	IS	13C-1,2,3,7,8,9-HxCDF	100.00	1.94e+08	0.53 y	39:56	-	0.992	y
31	IS	13C-1,2,3,4,6,7,8-HpCDF	100.00	1.68e+08	0.46 y	42:26	-	0.855	y
32	IS	13C-1,2,3,4,7,8,9-HpCDF	100.00	1.41e+08	0.45 y	45:14	-	0.722	y
33	IS	13C-OCDF	200.00	3.36e+08	0.90 y	50:15	-	0.857	y
34	C/Up	37Cl-2,3,7,8-TCDD	200.00	3.53e+08		27:38	-	0.764	y
35	RS	13C-1,2,3,4-TCDD	100.00	2.31e+08	0.80 y	27:02	2.31e+06	-	n
36	RS	13C-1,2,3,4-TCDF	100.00	3.49e+08	0.79 y	25:47	3.49e+06	-	n
37	RS/RT	13C-1,2,3,7,8,9-HxCDD	100.00	1.96e+08	1.25 y	39:21	1.96e+06	-	n
38	Tot	Total Tetra-Dioxins	0.00	-	- n	-	-	1.12	y
39	Tot	Total Penta-Dioxins	0.00	-	- n	-	-	0.940	y
40	Tot	Total Hexa-Dioxins	0.00	-	- n	-	-	0.876	y
41	Tot	Total Hepta-Dioxins	0.00	-	- n	-	-	0.890	y
42	Tot	Total Tetra-Furans	0.00	-	- n	-	-	1.01	y
43	Tot	1st Fn. Tot Penta-Furans	0.00	-	- n	-	-	0.856	y
44	Tot	Total Penta-Furans	0.00	-	- n	-	-	0.856	y
45	Tot	Total Hexa-Furans	0.00	-	- n	-	-	1.27	y
46	Tot	Total Hepta-Furans	0.00	-	- n	-	-	1.30	y

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS3 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
NATIVE ANALYTES								
2,3,7,8-TCDD	1.12	1.05	1.09	1.15	1.07	1.12	1.10	3.33
1,2,3,7,8-PeCDD	0.89	0.85	0.92	0.92	0.90	0.94	0.90	3.37
1,2,3,4,7,8-HxCDD	0.94	0.93	0.99	0.97	0.95	0.97	0.96	2.22
1,2,3,6,7,8-HxCDD	0.83	0.76	0.84	0.86	0.82	0.87	0.83	4.48
1,2,3,7,8,9-HxCDD	0.76	0.71	0.81	0.80	0.76	0.80	0.77	4.65
1,2,3,4,6,7,8-HpCDD	0.87	0.77	0.87	0.90	0.86	0.89	0.86	5.34
OCDD	0.86	0.82	0.88	0.89	0.88	0.90	0.87	3.09
2,3,7,8-TCDF	0.99	0.96	1.01	1.03	0.97	1.01	0.99	2.55
1,2,3,7,8-PeCDF	0.77	0.76	0.81	0.84	0.80	0.82	0.80	3.88
2,3,4,7,8-PeCDF	0.85	0.83	0.90	0.91	0.87	0.90	0.88	3.63
1,2,3,4,7,8-HxCDF	1.39	1.35	1.47	1.46	1.40	1.47	1.42	3.46
1,2,3,6,7,8-HxCDF	0.91	0.93	1.01	1.02	0.96	1.00	0.97	4.51
2,3,4,6,7,8-HxCDF	1.23	1.16	1.29	1.31	1.26	1.31	1.26	4.69
1,2,3,7,8,9-HxCDF	1.33	1.26	1.35	1.37	1.32	1.38	1.34	3.40
1,2,3,4,6,7,8-HpCDF	1.24	1.17	1.31	1.35	1.28	1.33	1.28	5.19
1,2,3,4,7,8,9-HpCDF	1.22	1.12	1.21	1.28	1.22	1.26	1.22	4.27
OCDF	0.88	0.83	0.91	0.94	0.90	0.92	0.90	4.37

Analyst: Date: 7/6/06

USEPA - ITD

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS4 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

	RELATIVE RESPONSE (RR)						MEAN RR	Cv (%RSD)
	CS1	CS2	CS3	CS4	CS5	CS6		
LABELED COMPOUNDS								
13C-2,3,7,8-TCDD	1.01	0.98	1.01	0.97	1.01	1.01	1.00	1.65
13C-1,2,3,7,8-PeCDD	0.93	0.93	0.97	0.92	0.98	1.00	0.96	3.62
13C-1,2,3,4,7,8-HxCDD	0.91	0.88	0.90	0.91	0.91	0.91	0.90	1.50
13C-1,2,3,6,7,8-HxCDD	1.11	1.08	1.12	1.07	1.10	1.03	1.09	2.89
13C-1,2,3,4,6,7,8-HpCDD	0.96	0.92	0.97	0.92	1.00	0.97	0.96	3.26
13C-OCDD	0.73	0.67	0.72	0.66	0.75	0.74	0.71	5.16
13C-2,3,7,8-TCDF	0.94	0.93	0.96	0.90	0.96	0.94	0.94	2.38
13C-1,2,3,7,8-PeCDF	0.98	0.98	1.03	0.94	1.02	1.05	1.00	4.30
13C-2,3,4,7,8-PeCDF	0.92	0.93	0.97	0.88	0.98	0.99	0.94	4.40
13C-1,2,3,4,7,8-HxCDF	0.86	0.85	0.87	0.85	0.87	0.85	0.86	1.30
13C-1,2,3,6,7,8-HxCDF	1.26	1.22	1.26	1.22	1.23	1.18	1.23	2.51
13C-2,3,4,6,7,8-HxCDF	0.90	0.89	0.90	0.86	0.89	0.86	0.88	2.02
13C-1,2,3,7,8,9-HxCDF	0.99	0.97	1.00	0.93	1.00	0.99	0.98	3.07
13C-1,2,3,4,6,7,8-HpCDF	0.87	0.85	0.88	0.82	0.90	0.85	0.86	3.00
13C-1,2,3,4,7,8,9-HpCDF	0.70	0.68	0.71	0.64	0.73	0.72	0.70	4.45
13C-OCDF	0.83	0.78	0.84	0.74	0.88	0.86	0.82	6.47
CLEANUP STANDARD								
37Cl-2,3,7,8-TCDD	0.88	0.83	0.81	0.74	0.72	0.76	0.79	7.43

Analyst: Date: 7/6/06

USEPA - ITD

FORM 3C

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS3 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS						QC LIMITS
		CS1	CS2	CS3	CS4	CS5	CS6	
NATIVE ANALYTES								
2,3,7,8-TCDD	M/M+2	0.85	0.85	0.81	0.77	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.65	1.53	1.57	1.54	1.58	1.57	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.32	1.27	1.27	1.26	1.26	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.20	1.28	1.21	1.25	1.26	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.33	1.25	1.24	1.22	1.24	1.25	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.11	1.14	1.01	1.05	1.05	1.03	0.88-1.20
OCDD	M+2/M+4	0.89	0.85	0.90	0.89	0.87	0.91	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.66	0.75	0.74	0.79	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.41	1.54	1.55	1.58	1.56	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.46	1.51	1.53	1.56	1.57	1.56	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.24	1.23	1.25	1.25	1.24	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.31	1.24	1.24	1.25	1.24	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.15	1.31	1.25	1.25	1.24	1.25	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.34	1.21	1.23	1.24	1.26	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	1.04	1.06	1.04	1.04	1.04	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.07	1.08	1.00	1.04	1.05	1.04	0.88-1.20
OCDF	M+2/M+4	0.87	0.91	0.91	0.93	0.93	0.92	0.76-1.02

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 3D

PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

CS0 Data Filename: 05JUL06M S2 CS3 Data Filename: 05JUL06M S1

CS1 Data Filename: 05JUL06M S3 CS4 Data Filename: 05JUL06M S5

CS2 Data Filename: 05JUL06M S4 CS5 Data Filename: 05JUL06M S6

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUNDANCE RATIOS CS1	CS2	CS3	CS4	CS5	CS6	QC LIMITS
13C-2,3,7,8-TCDD	M/M+2	0.78	0.81	0.78	0.79	0.78	0.79	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.58	1.58	1.59	1.59	1.58	1.32-1.78
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.26	1.27	1.26	1.27	1.27	1.05-1.43
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.25	1.25	1.28	1.25	1.27	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	1.06	1.06	1.07	1.05	1.06	0.88-1.20
13C-OCDD	M+2/M+4	0.92	0.90	0.89	0.91	0.90	0.91	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.79	0.81	0.79	0.79	0.80	0.80	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.60	1.59	1.58	1.60	1.60	1.32-1.78
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.60	1.60	1.62	1.59	1.61	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.53	0.53	0.53	0.53	0.53	0.43-0.59
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.53	0.53	0.54	0.52	0.53	0.43-0.59
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.53	0.53	0.53	0.53	0.53	0.43-0.59
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.52	0.53	0.52	0.52	0.53	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.44	0.45	0.44	0.46	0.46	0.37-0.51
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.45	0.44	0.45	0.44	0.45	0.37-0.51
13C-OCDF	M+2/M+4	0.90	0.91	0.90	0.91	0.90	0.90	0.76-1.02

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 11:49:47

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	y	50.8	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.6	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	52.1	43.0 - 58.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	102	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	10.3	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	52.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	51.9	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.3	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	52.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.9	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	51.4	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.6	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.4	43.0 - 58.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	105	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	96.1	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	100	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	99.0	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	95.7	72.0 - 138
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	186	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.9	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	93.9	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	93.4	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	98.9	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	99.1	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	97.4	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	94.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	95.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	92.2	77.0 - 129
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	180	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.37	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/6/06

EPA Method 8290
Form 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.00 - 12.0
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	y	50.8	40.0 - 60.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	50.6	40.0 - 60.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.6	40.0 - 60.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.22	1.05-1.43	y	51.7	40.0 - 60.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	52.1	40.0 - 60.0
OCDD	M+2/M+4	0.89	0.76-1.02	y	102	80.0 - 120
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	10.3	8.00 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	52.6	40.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	51.9	40.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.3	40.0 - 60.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	52.4	40.0 - 60.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	51.9	40.0 - 60.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	y	51.4	40.0 - 60.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.6	40.0 - 60.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.4	40.0 - 60.0
OCDF	M+2/M+4	0.93	0.76-1.02	y	105	80.0 - 120

(1) See Method 8290 for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Method 8290.

(3) Contract-required concentration range as specified in Method 8290

Analyst: [signature] Date: 7/6/06

EPA Method 8290
Form 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	70.0 - 130
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	96.1	70.0 - 130
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	100	70.0 - 130
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	99.0	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	y	95.7	70.0 - 130
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	186	140 - 260
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.9	70.0 - 130
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	93.9	70.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	93.4	70.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	98.9	70.0 - 130
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	99.1	70.0 - 130
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	97.4	70.0 - 130
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	94.2	70.0 - 130
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	95.4	70.0 - 130
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37-0.51	y	92.2	70.0 - 130
13C-OCDF	M+2/M+4	0.91	0.76-1.02	y	180	140 - 260
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					9.37	7.00 - 13.0

(1) See Method 8290 for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Method 8290.

(3) Contract-required concentration range as specified in Method 8290

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4A
TCDD CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.20 - 12.3
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	10.3	8.60 - 11.6
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	85.0 - 117
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	95.9	76.0 - 131
CLEANUP STANDARDS						
37Cl-2,3,7,8-TCDD					9.37	8.30 - 12.1

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6A, Method 1613

Analyst: [signature] Date: 7/6/06

USEPA - ITD

FORM 4A
TCDD CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.20 - 12.3
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	85.0 - 117
CLEANUP STANDARDS						
37Cl-2,3,7,8-TCDD					9.37	8.30 - 12.1

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6A, Method 1613

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 4A
EPA METHOD 8290 TCDD CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL1 GC Column ID: DB5

VER Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

	M/Z'S FORMING RATIO	ION ABUND. RATIO	QC LIMITS	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	10.5	8.00 - 12.0
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	97.6	70.0 - 130
CLEANUP STANDARDS						
37Cl-2,3,7,8-TCDD					9.37	7.00 - 13.0

Analyst: _____ Date: 7/6/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-5 IS Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:37	1,3,6,8-TCDF (F)	23:16
1,2,8,9-TCDD (L)	28:34	1,2,8,9-TCDF (L)	28:48
1,2,4,7,9-PeCDD (F)	30:27	1,3,4,6,8-PeCDF (F)	28:37
1,2,3,8,9-PeCDD (L)	33:60	1,2,3,8,9-PeCDF (L)	34:26
1,2,4,6,7,9-HxCDD (F)	36:18	1,2,3,4,6,8-HxCDF (F)	35:25
1,2,3,7,8,9-HxCDD (L)	39:22	1,2,3,7,8,9-HxCDF (L)	39:57
1,2,3,4,6,7,9-HpCDD (F)	42:57	1,2,3,4,6,7,8-HpCDF (F)	42:26
1,2,3,4,6,7,8-HpCDD (L)	44:19	1,2,3,4,7,8,9-HpCDF (L)	45:15

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/6/06

EPA 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-5 IS Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:37	1,3,6,8-TCDF (F)	23:16
1,2,8,9-TCDD (L)	28:34	1,2,8,9-TCDF (L)	28:48

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/6/06

Form 5

TCDD RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-5 IS Data Filename: 05JUL06M Sam:1 Analysis Date: 5-JUL-06 Time: 11:49:47

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:37
1,2,8,9-TCDD (L)	28:34

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/6/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.236	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.172	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.221	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/4/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.126	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.078	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.267	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [illegible] Date: 7/6/06

FORM 6A
TCDD RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
37Cl-2,3,7,8-TCDD		1.023	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FORM 6A
TCDD RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 5-JUL-06 11:49:47 CS3 or VER Data Filename: 05JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
LABELED COMPOUNDS			
13C-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.021	0.976-1.043
37Cl-2,3,7,8-TCDD		1.023	0.989-1.052

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FAL ID: ST070506M3 Filename: 05JUL06M Sam:1 Acquired: 5-JUL-06 11:49:47 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 051212J ConCal: NA EndCal: NA
Results: GC Column: db5 Amount: 1.000 NATO 1989 Tox: 103
WHO 1998 Tox: 129

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.46e+07	0.77 y	27:37	1.10	10.5		2.50	-	*	
1,2,3,7,8-PeCDD	5.50e+07	1.54 y	33:25	0.90	50.8		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.12e+07	1.27 y	38:45	0.96	50.6		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.30e+07	1.21 y	38:55	0.83	51.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.71e+07	1.22 y	39:22	0.77	51.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	3.85e+07	1.05 y	44:19	0.86	52.1		2.50	-	*	
OCDD	5.49e+07	0.89 y	49:51	0.87	102		2.50	-	*	
2,3,7,8-TCDF	1.80e+07	0.79 y	26:53	0.99	10.3		2.50	-	*	
1,2,3,7,8-PeCDF	7.71e+07	1.55 y	31:42	0.80	52.6		2.50	-	*	
2,3,4,7,8-PeCDF	7.81e+07	1.56 y	33:01	0.88	51.9		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.80e+07	1.25 y	37:22	1.42	51.3		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.78e+07	1.24 y	37:34	0.97	52.4		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.27e+07	1.25 y	38:31	1.26	51.9		2.50	-	*	
1,2,3,7,8,9-HxCDF	5.95e+07	1.23 y	39:57	1.34	51.4		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.20e+07	1.04 y	42:26	1.28	52.6		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	3.85e+07	1.04 y	45:15	1.22	52.4		2.50	-	*	
OCDF	6.49e+07	0.93 y	50:15	0.90	105		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.27e+08	0.79 y	27:36	1.00	97.6					97.6
13C-1,2,3,7,8-PeCDD	1.20e+08	1.59 y	33:23	0.96	96.1					96.1
13C-1,2,3,4,7,8-HxCDD	8.50e+07	1.26 y	38:44	0.90	100					100
13C-1,2,3,6,7,8-HxCDD	1.01e+08	1.28 y	38:53	1.09	99.0					99.0
13C-1,2,3,4,6,7,8-HpCDD	8.58e+07	1.07 y	44:18	0.96	95.7					95.7
13C-OCDD	1.24e+08	0.91 y	49:51	0.71	186					92.9
13C-2,3,7,8-TCDF	1.75e+08	0.79 y	26:52	0.94	95.9					95.9
13C-1,2,3,7,8-PeCDF	1.83e+08	1.58 y	31:40	1.00	93.9					93.9
13C-2,3,4,7,8-PeCDF	1.72e+08	1.62 y	32:59	0.94	93.4					93.4
13C-1,2,3,4,7,8-HxCDF	7.96e+07	0.53 y	37:21	0.86	98.9					98.9
13C-1,2,3,6,7,8-HxCDF	1.14e+08	0.54 y	37:33	1.23	99.1					99.1
13C-2,3,4,6,7,8-HxCDF	8.06e+07	0.53 y	38:29	0.88	97.4					97.4
13C-1,2,3,7,8,9-HxCDF	8.66e+07	0.52 y	39:56	0.98	94.2					94.2
13C-1,2,3,4,6,7,8-HpCDF	7.71e+07	0.44 y	42:25	0.86	95.4					95.4
13C-1,2,3,4,7,8,9-HpCDF	6.03e+07	0.45 y	45:14	0.70	92.2					92.2
13C-OCDF	1.38e+08	0.91 y	50:14	0.82	180					89.8
37Cl-2,3,7,8-TCDD	9.65e+06		27:38	0.81	9.13					91.3
13C-1,2,3,4-TCDD	1.31e+08	0.81 y	27:01	-	68.2					
13C-1,2,3,4-TCDF	1.95e+08	0.79 y	25:47	-	67.9					
13C-1,2,3,7,8,9-HxCDD	9.36e+07	1.26 y	39:21	-	62.7					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	6.21e+07		23:04	1.10	44.4		2.50	-	*	29
Total Penta-Dioxins	1.53e+08		30:27	0.90	141		2.50	-	*	18
Total Hexa-Dioxins	1.72e+08		36:18	0.85	218		2.50	-	*	7
Total Hepta-Dioxins	7.53e+07		42:57	0.86	102		2.50	-	*	32
Total Tetra-Furans	7.08e+07		22:57	0.99	40.6		2.50	-	*	16
1st Fn. Tot Penta-Furans	6.87e+07		28:37	0.84	46.2		2.50	-	*	2 PeCDF
Total Penta-Furans	2.11e+08		30:23	0.84	142		2.50	-	*	14 188
Total Hexa-Furans	2.98e+08		35:25	1.22	270		2.50	-	*	24
Total Hepta-Furans	9.19e+07		42:26	1.25	107		2.50	-	*	15

Analyst: _____ Date: 7/10/06

FAL ID: ST070506M3 Filename: 05JUL06M Sam:1 Acquired: 5-JUL-06 11:49:47 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 051212J ConCal: NA EndCal: NA
Results: GC Column: db5 Amount: 1.000

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	WHO 1998 Noise	Tox: NA DL	Rec
2,3,7,8-TCDD	1.46e+07	0.77 y	27:37	1.10	10.5		2.50	-	*	
2,3,7,8-TCDF	1.80e+07	0.79 y	26:53	0.994	10.3		2.50	-	*	
13C-2,3,7,8-TCDD	1.27e+08	0.79 y	27:36	0.998	97.6					97.6
13C-2,3,7,8-TCDF	1.75e+08	0.79 y	26:52	0.937	95.9					95.9
37Cl-2,3,7,8-TCDD	9.65e+06		27:38	0.809	9.13					91.3
13C-1,2,3,4-TCDD	1.31e+08	0.81 y	27:01	-	68.2					
13C-1,2,3,4-TCDF	1.95e+08	0.79 y	25:47	-	67.9					

Analyst: Date: 7/6/06

FAL ID: ST070506M3 Filename: 05JUL06M Sam:1 Acquired: 5-JUL-06 11:49:47 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 051212J ConCal: NA EndCal: NA
Results: GC Column: db5 Amount: 1.000 NATO 1989 Tox: NA
WHO 1998 Tox: NA

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	Rec
2,3,7,8-TCDD	1.46e+07	0.77 y	27:37	1.10	10.5		2.50	-	*	
13C-2,3,7,8-TCDD	1.27e+08	0.79 y	27:36	0.998	97.6					97.6
37Cl-2,3,7,8-TCDD	9.65e+06	0.81 y	27:38	0.809	9.13					91.3
13C-1,2,3,4-TCDD	1.31e+08		27:01	-	68.2					

Analyst: Date: 7/6/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:05JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

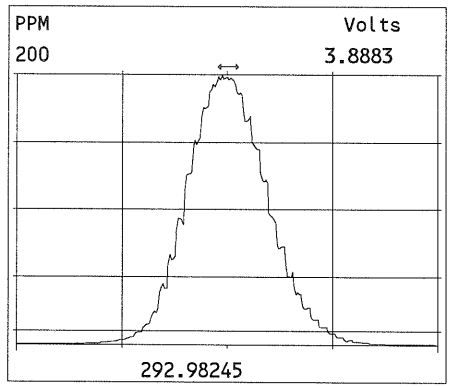
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
05JUL06M	1	ST070506M3	1613 CS3 051212J	5-JUL-06 11:49:47	NA	NA	TC
05JUL06M	2	ST070506M0	1613 CS0 051212G	5-JUL-06 12:45:16	NA	NA	TC
05JUL06M	3	ST070506M1	1613 CS1 051212H	5-JUL-06 13:40:39	NA	NA	TC
05JUL06M	4	ST070506M2	1613 CS2 051212I	5-JUL-06 14:36:03	NA	NA	TC
05JUL06M	5	ST070506M4	1613 CS4 051212K	5-JUL-06 15:31:26	NA	NA	TC
05JUL06M	6	ST070506M5	1613 CS5 051212L	5-JUL-06 16:26:53	NA	NA	TC
05JUL06M	7	SB070506M1	Solvent Blank	5-JUL-06 17:22:17	NA	NA	TC
05JUL06M	8	ST070506M6	1613 CS3 051212J	5-JUL-06 18:17:45	ST070506M6	ST070506M7	TC
05JUL06M	9	0899-001-0001-OPR	OPR	5-JUL-06 19:13:09	ST070506M6	ST070506M7	TC
05JUL06M	10	0898-001-0001-OPR	OPR	5-JUL-06 20:08:33	ST070506M6	ST070506M7	TC
05JUL06M	11	0898-001-0001-MB	Method Blank	5-JUL-06 21:03:48	ST070506M6	ST070506M7	TC
05JUL06M	12	0899-001-0001-MB	Method Blank	5-JUL-06 21:59:03	ST070506M6	ST070506M7	TC
05JUL06M	13	3941-001-0001-SA	2606270001	5-JUL-06 22:54:19	ST070506M6	ST070506M7	TC
05JUL06M	14	3942-001-0001-SA	Well #5	5-JUL-06 23:49:35	ST070506M6	ST070506M7	TC
05JUL06M	15	3929-001-0001-SA	E3-B4-EP162-159	6-JUL-06 00:44:54	ST070506M6	ST070506M7	TC
05JUL06M	16	3934-001-0001-SA	E3-B4-EP162-160	6-JUL-06 01:40:15	ST070506M6	ST070506M7	TC
05JUL06M	17	3934-002-0001-SA	E3-B4-EP162-161	6-JUL-06 02:35:32	ST070506M6	ST070506M7	TC
05JUL06M	18	3934-003-0001-SA	E3-B4-EP162-162	6-JUL-06 03:30:47	ST070506M6	ST070506M7	TC
05JUL06M	19	3934-004-0001-SA	E3-B4-EP162-163	6-JUL-06 04:26:06	ST070506M6	ST070506M7	TC
05JUL06M	20	SB070506M2	Solvent Blank	6-JUL-06 05:21:22	ST070506M6	ST070506M7	TC
05JUL06M	21	ST070506M7	1613 CS3 051212J	6-JUL-06 06:16:37	ST070506M6	ST070506M7	TC

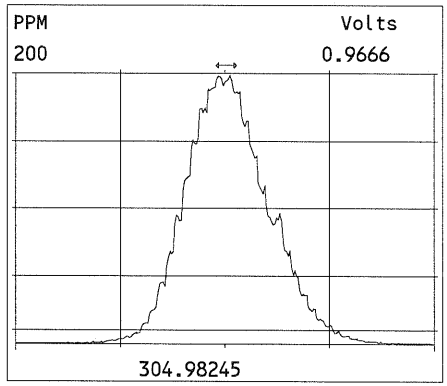
7/6/06

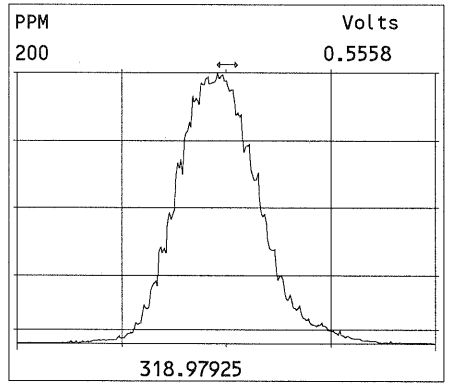
Data Backed Up:_____

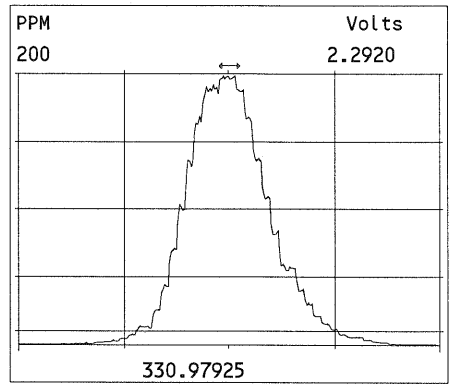
Date:_____

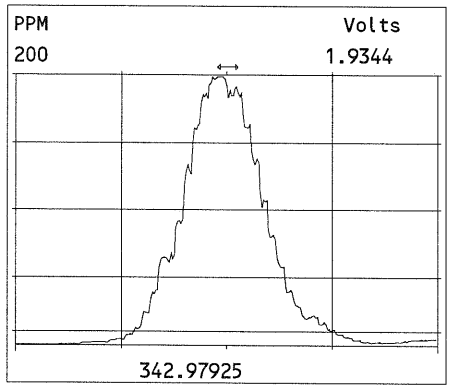
Peak Locate Examination: 5-JUL-2006:11:48 File:05JUL06M
Experiment:PCDD Function:1 Reference:PFK

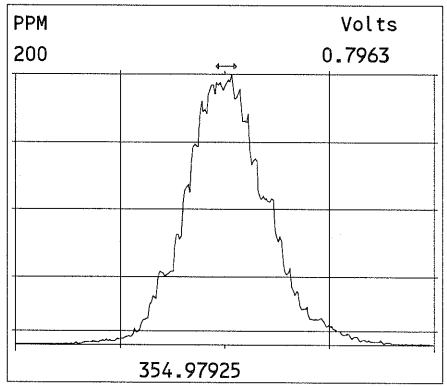


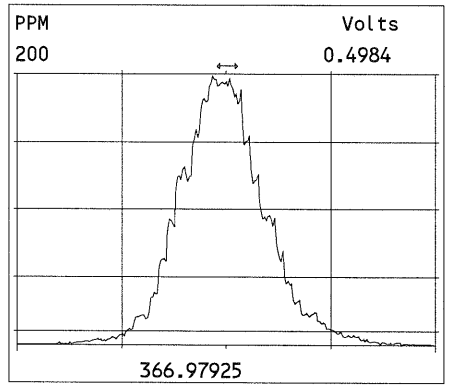


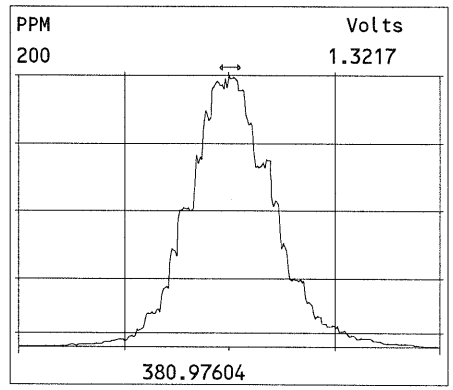


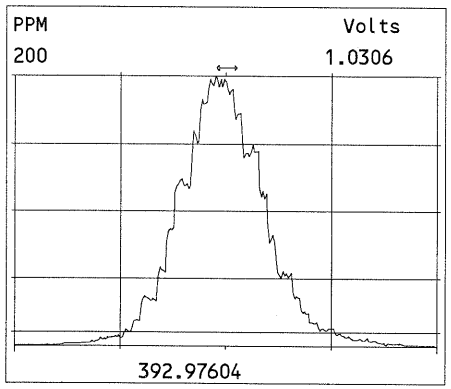


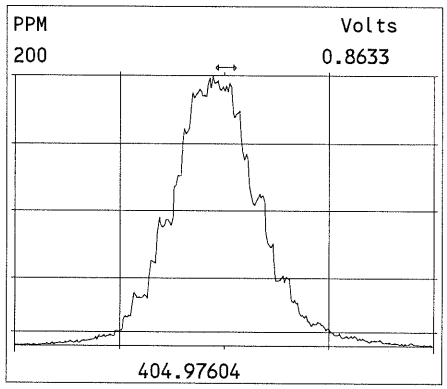


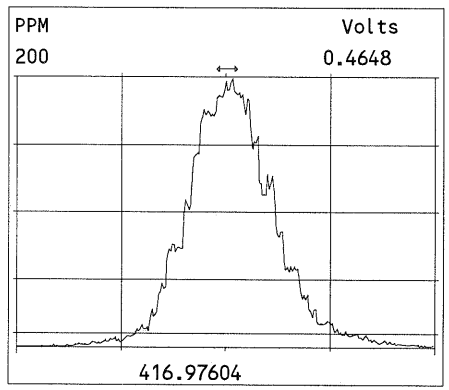






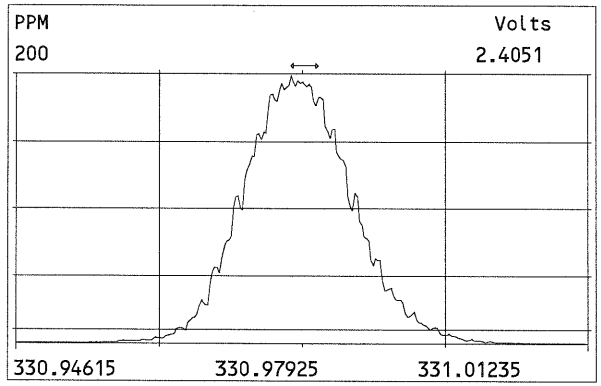


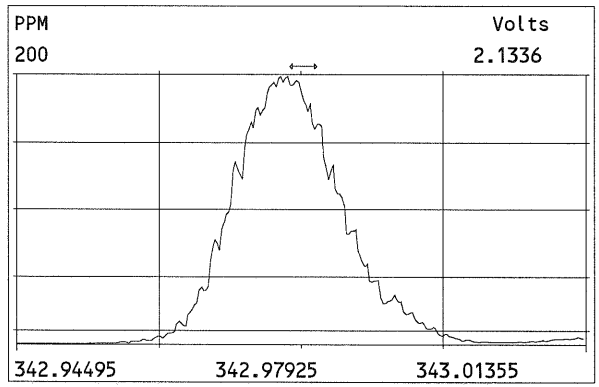


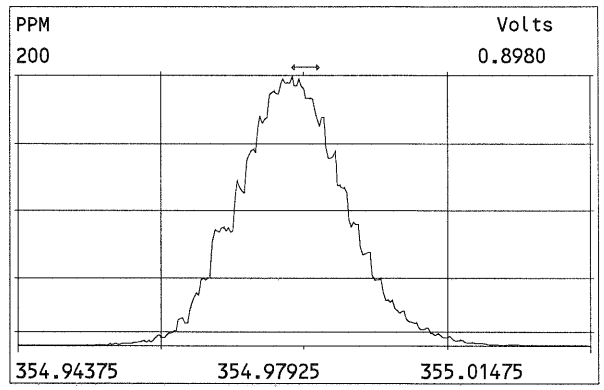


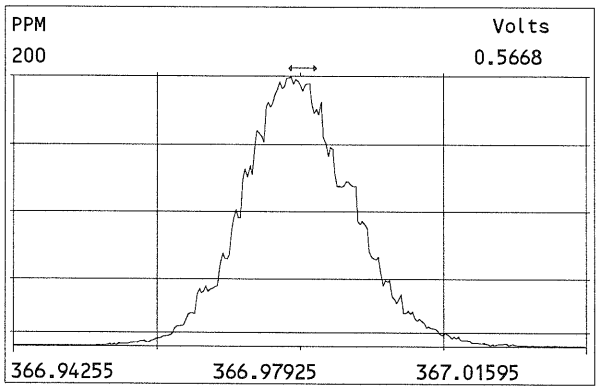
505

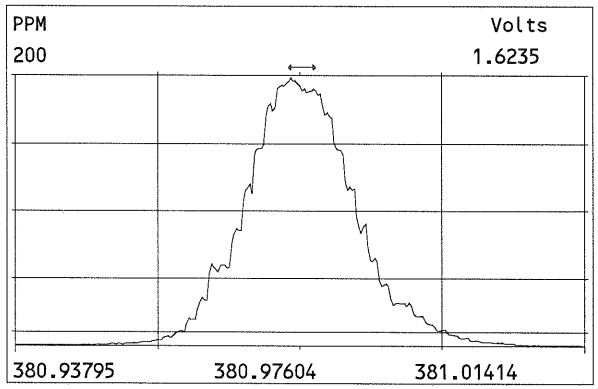
Peak Locate Examination: 5-JUL-2006:11:48 File:05JUL06M
Experiment:PCDD Function:2 Reference:PFK

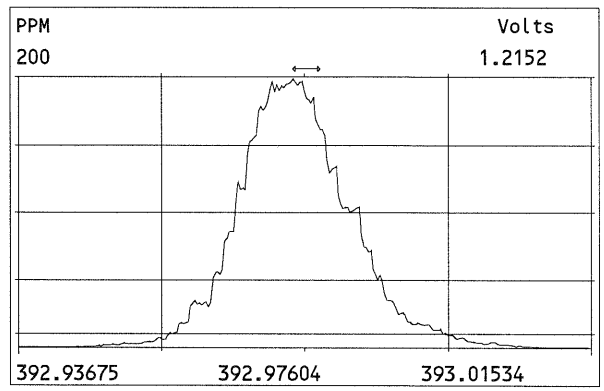


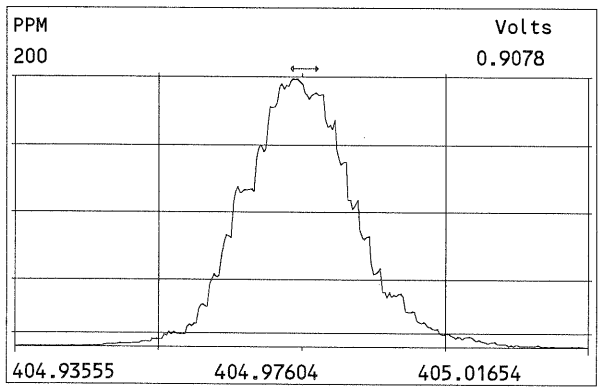


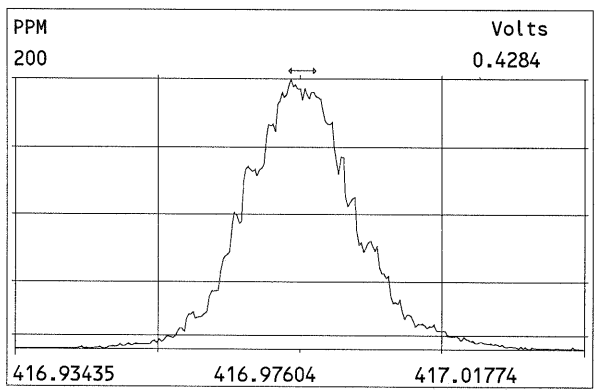






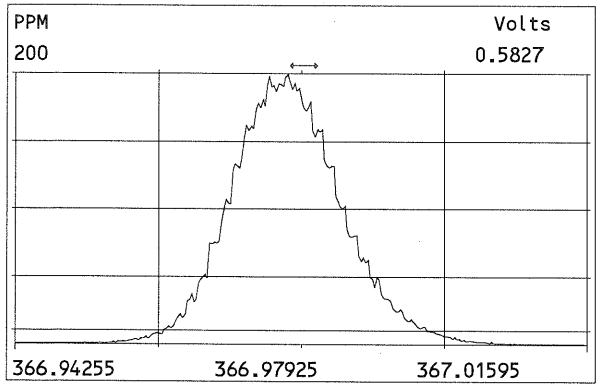


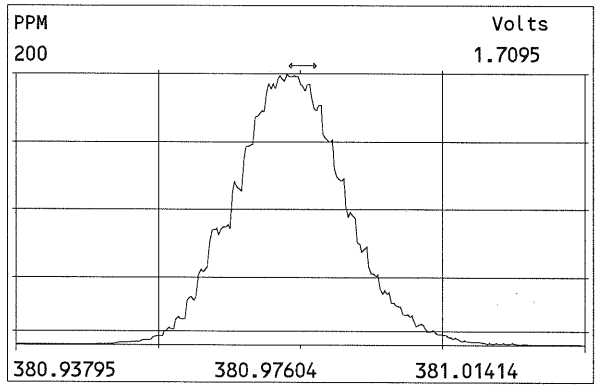


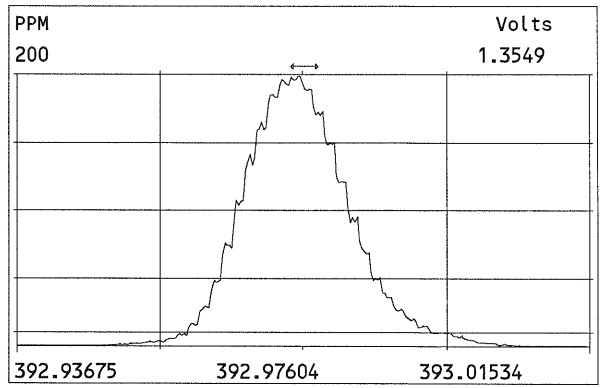


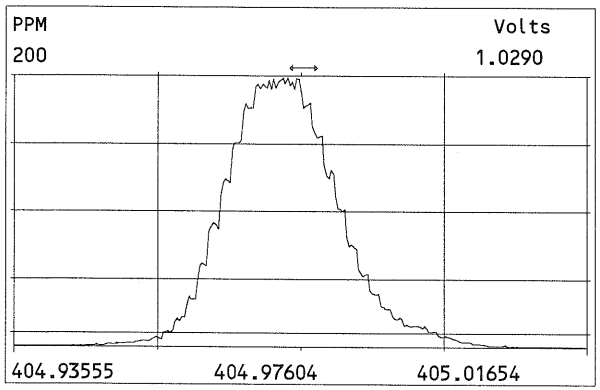
506

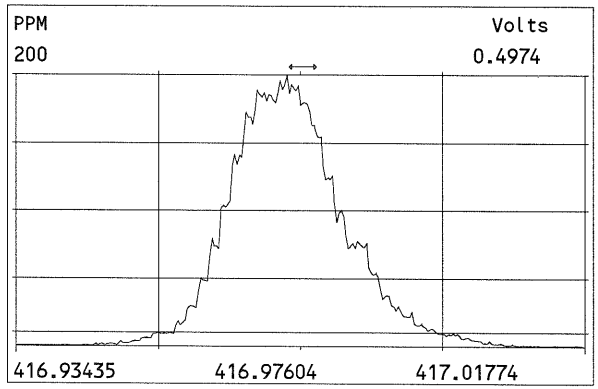
Peak Locate Examination: 5-JUL-2006:11:48 File:05JUL06M
Experiment:PCDD Function:3 Reference:PFK

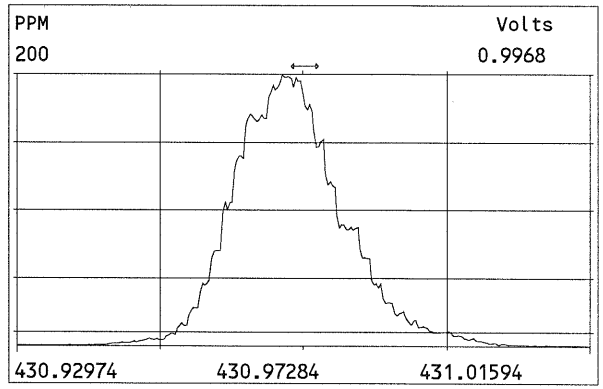


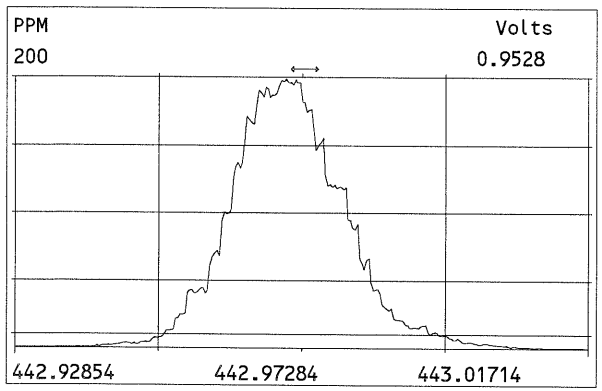


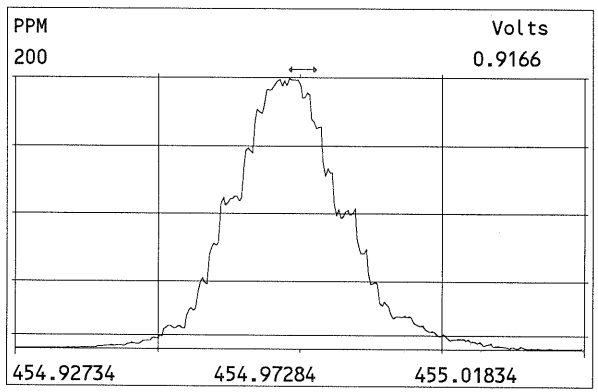




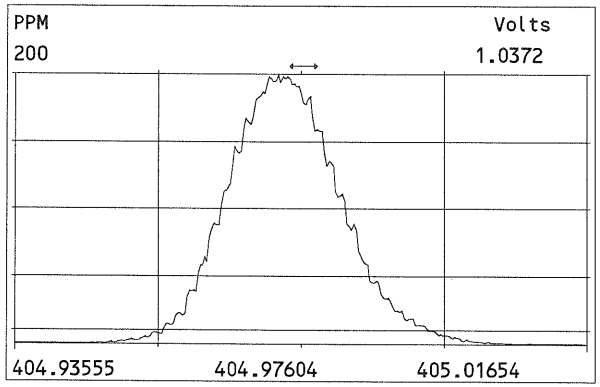


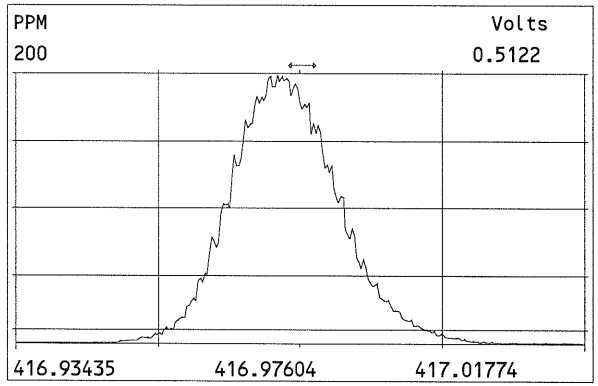


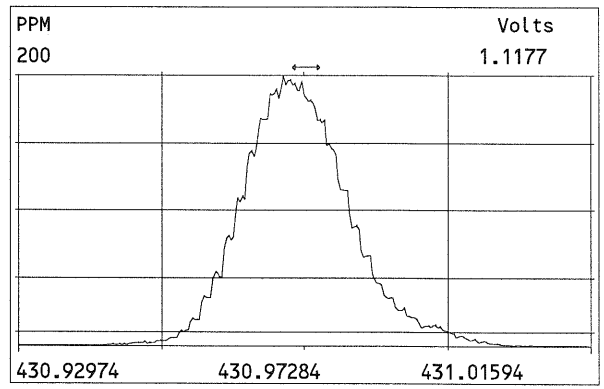


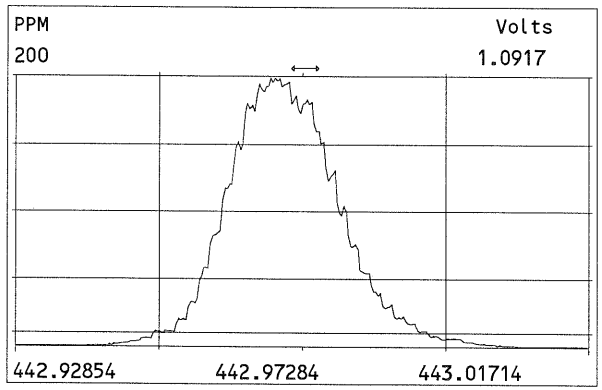


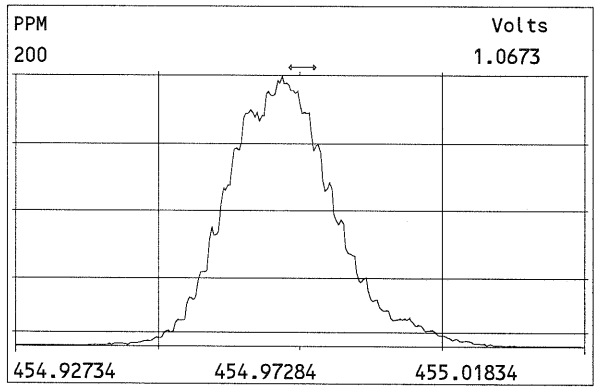
Peak Locate Examination: 5-JUL-2006:11:49 File:05JUL06M
Experiment:PCDD Function:4 Reference:PFK

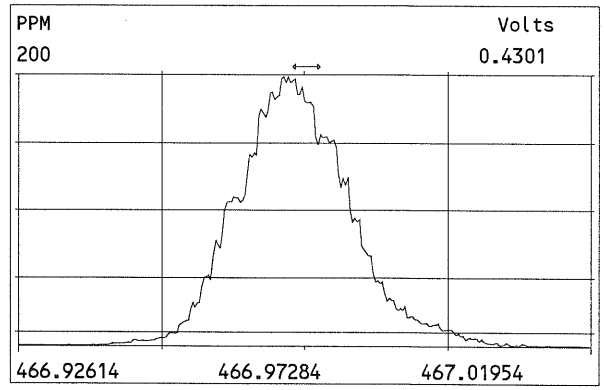


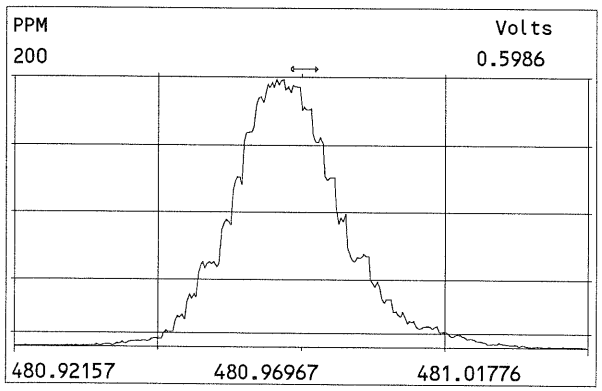




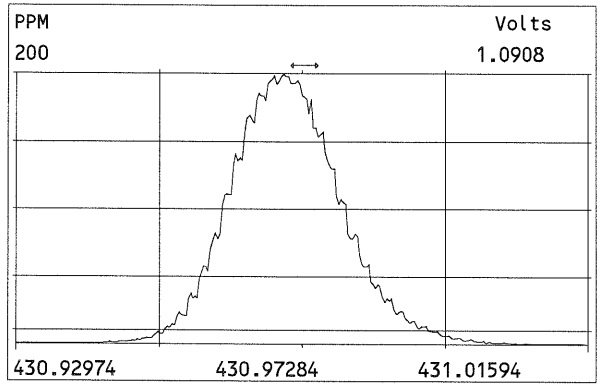


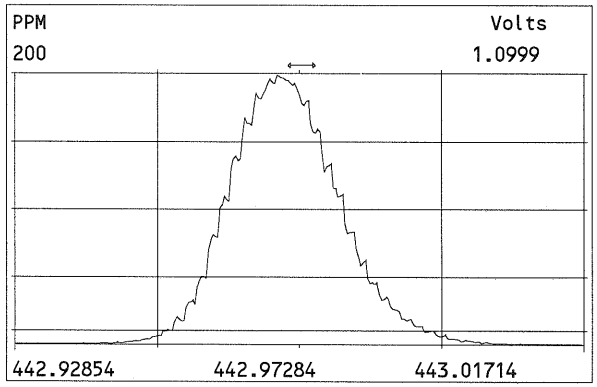


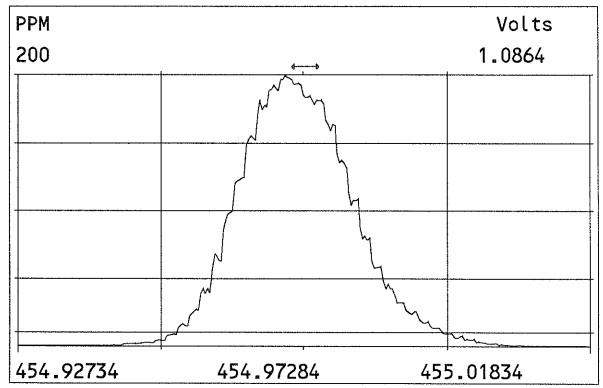


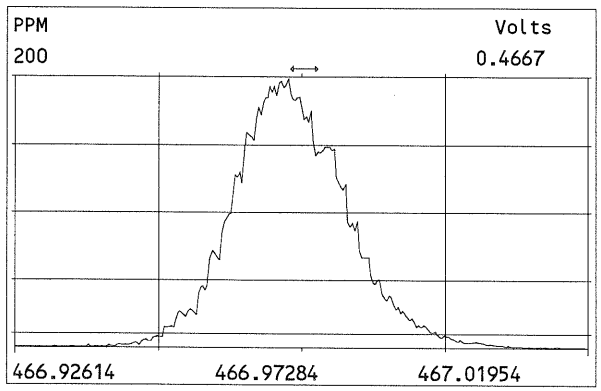


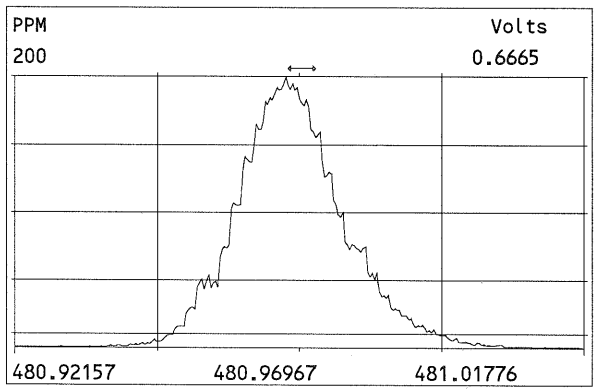
Peak Locate Examination: 5-JUL-2006:11:49 File:05JUL06M
Experiment:PCDD Function:5 Reference:PFK

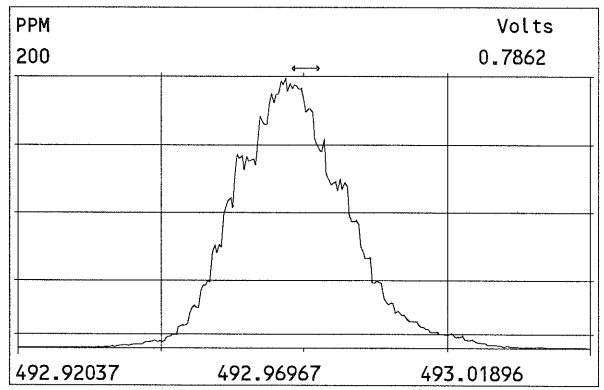


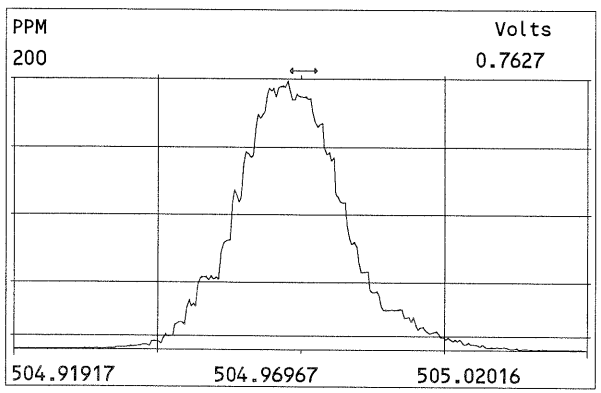


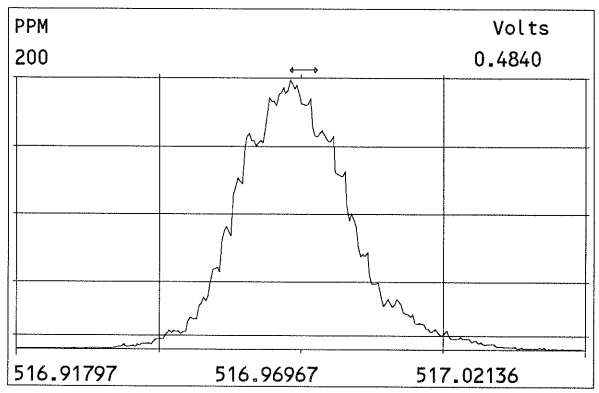




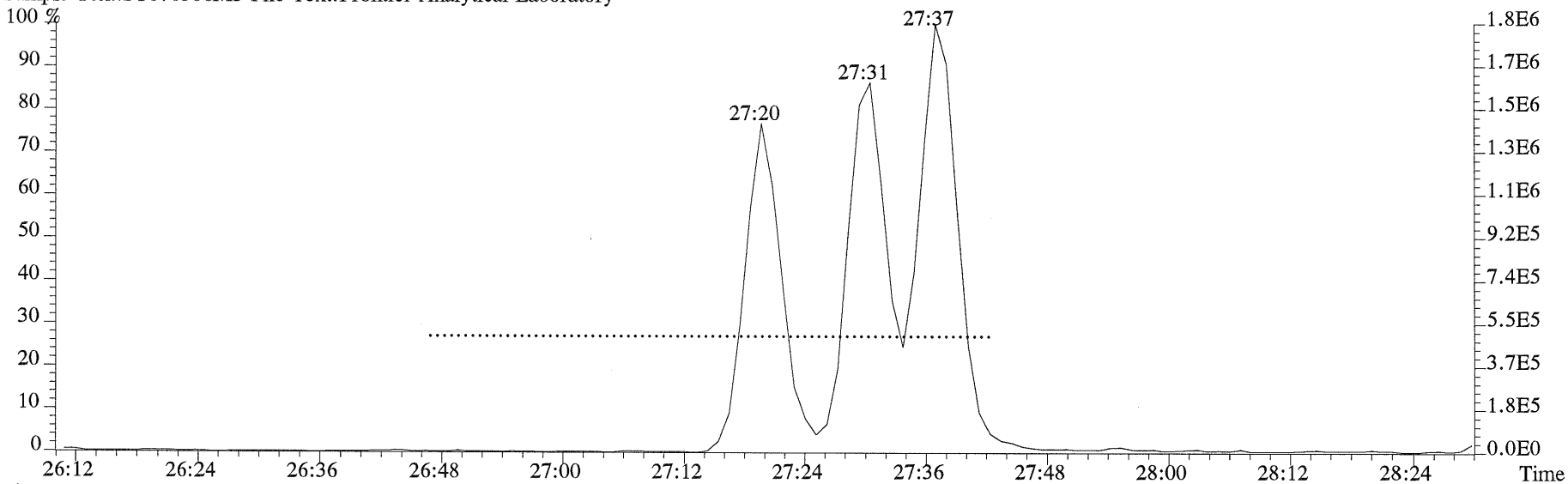




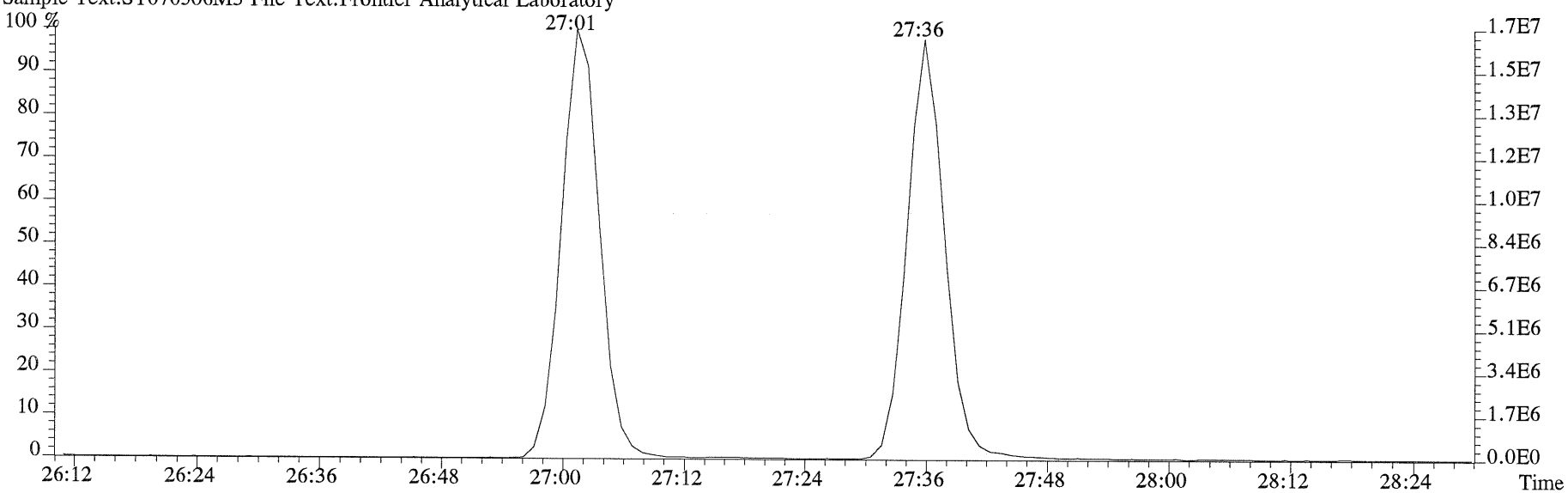




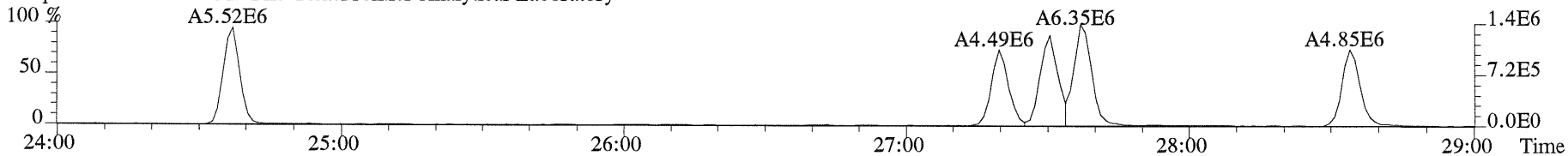
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
321.8936 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



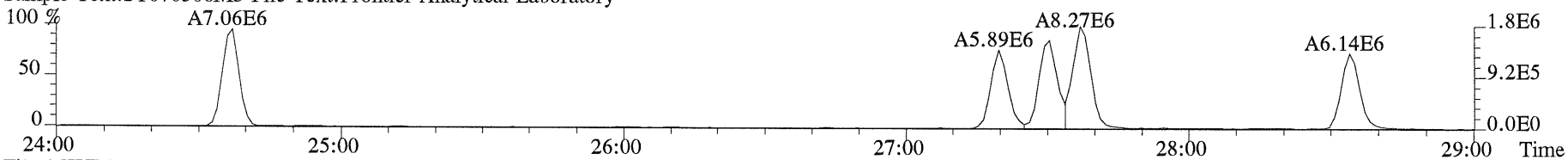
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



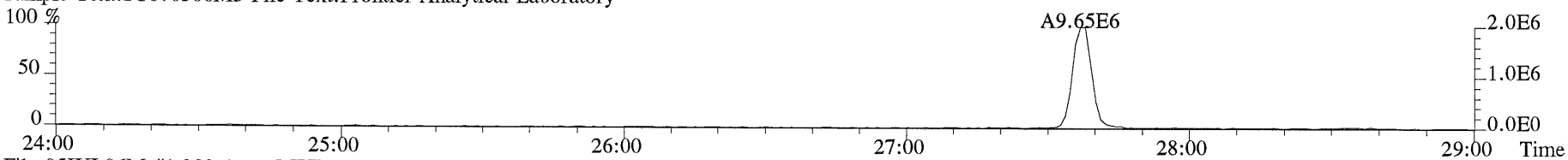
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



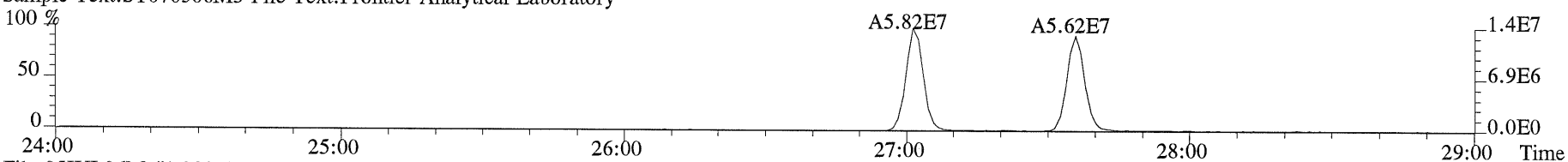
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



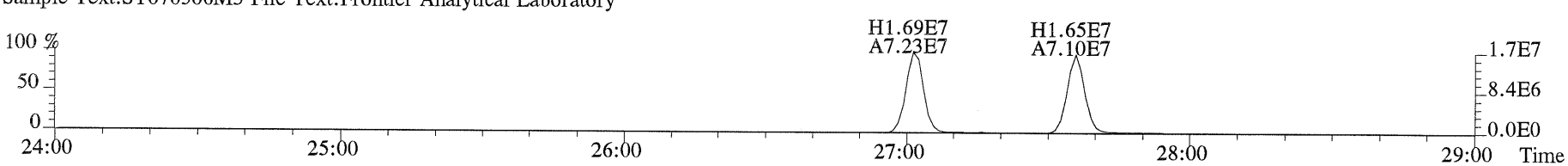
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



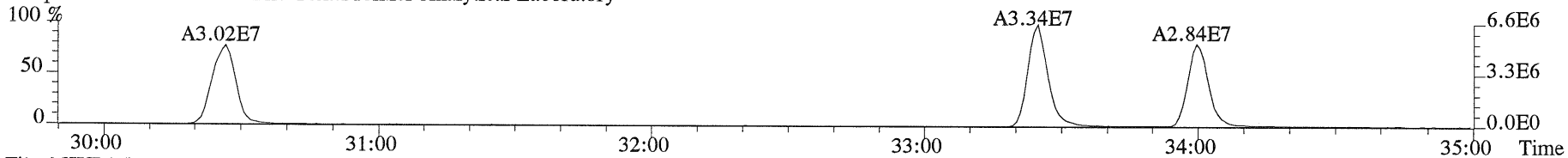
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



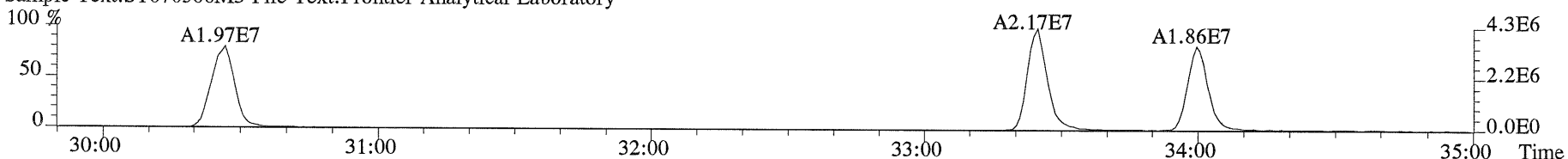
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



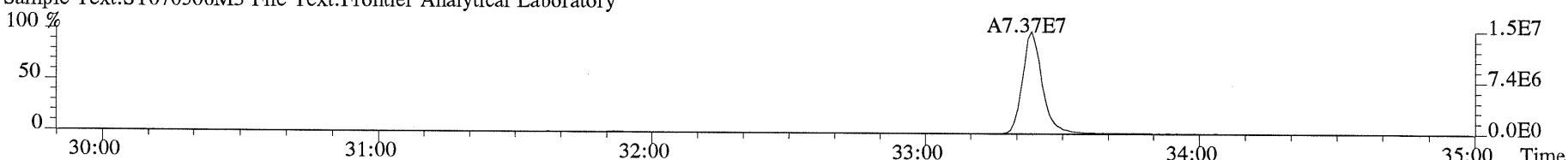
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



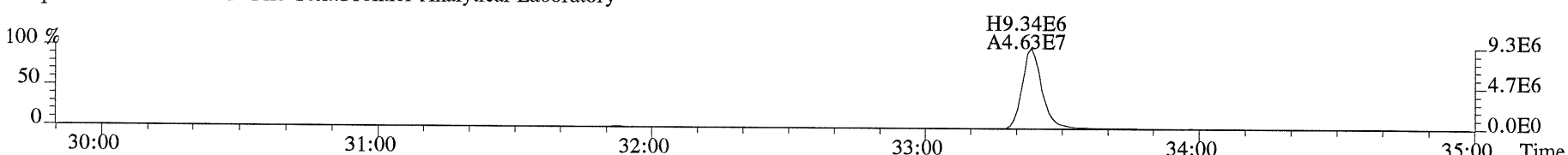
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



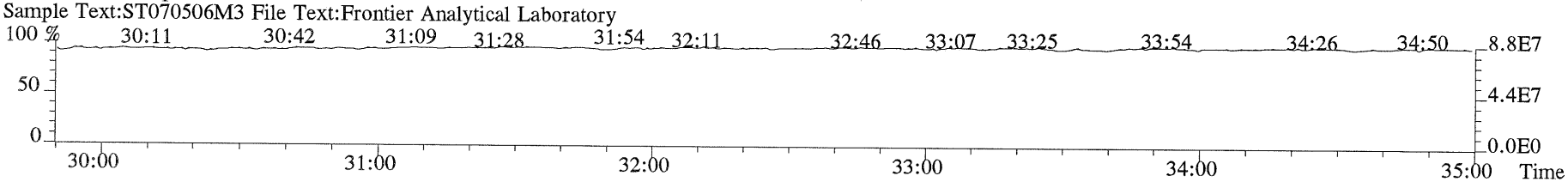
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



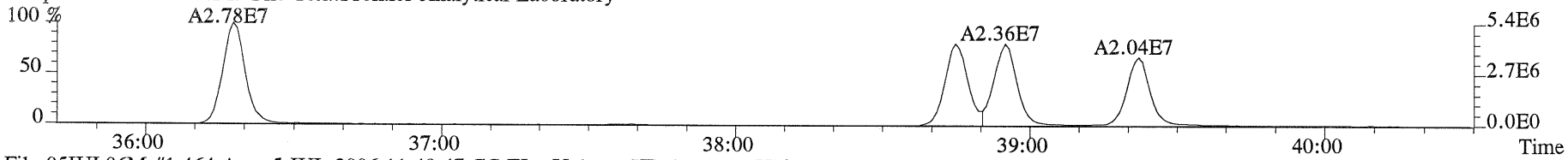
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



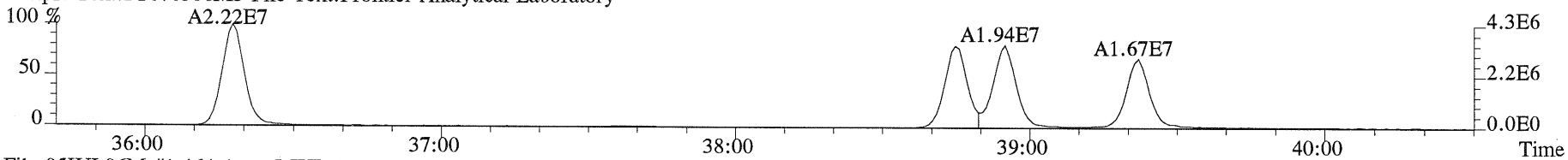
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



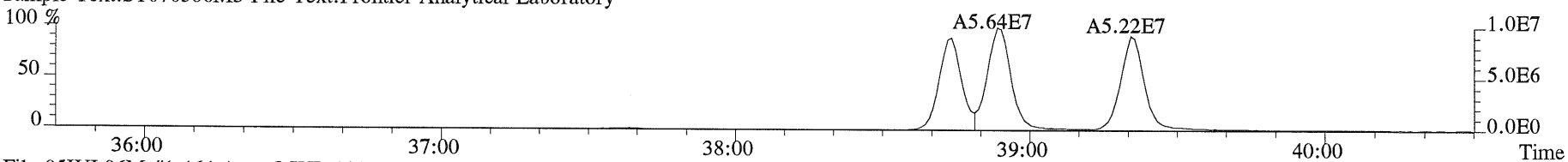
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



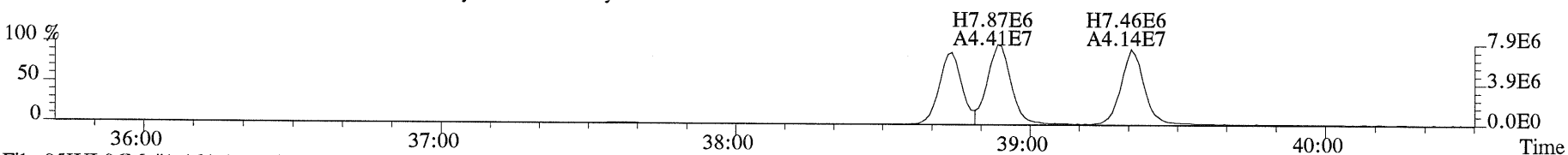
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



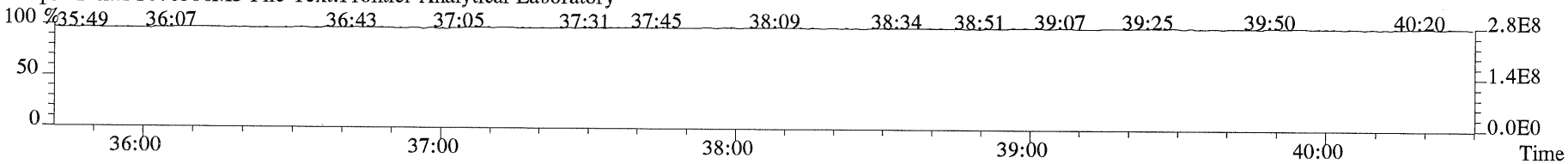
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



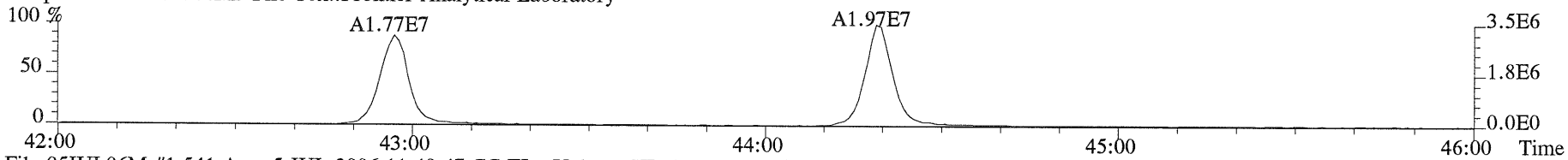
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



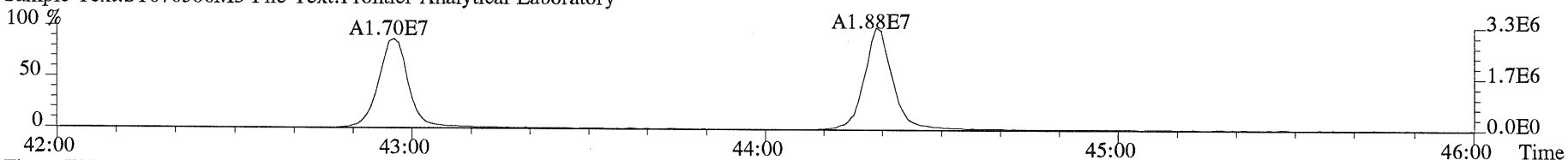
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



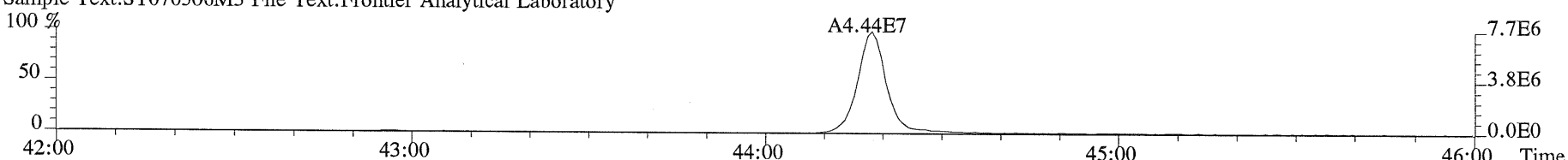
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



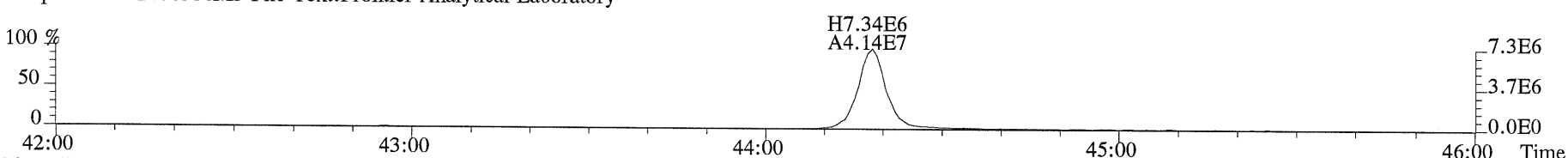
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



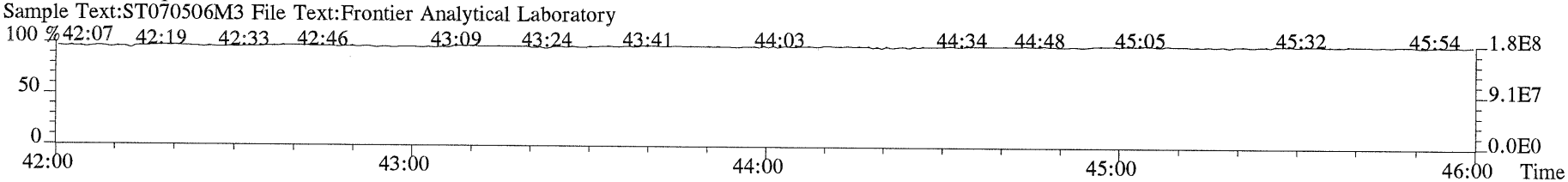
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



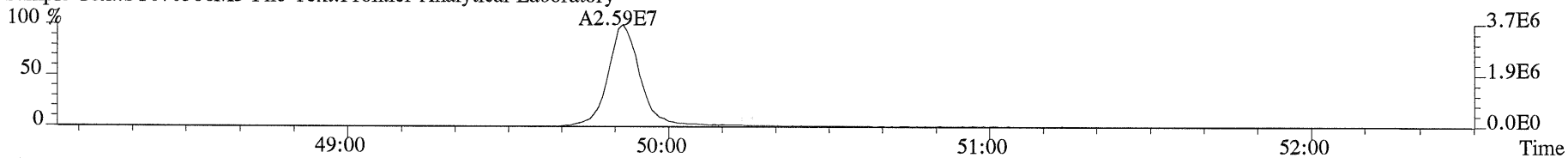
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



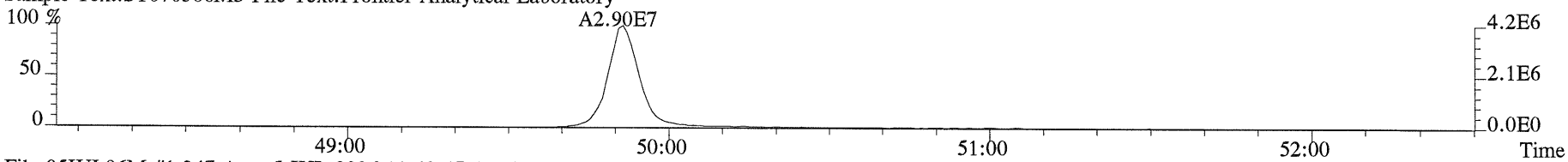
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



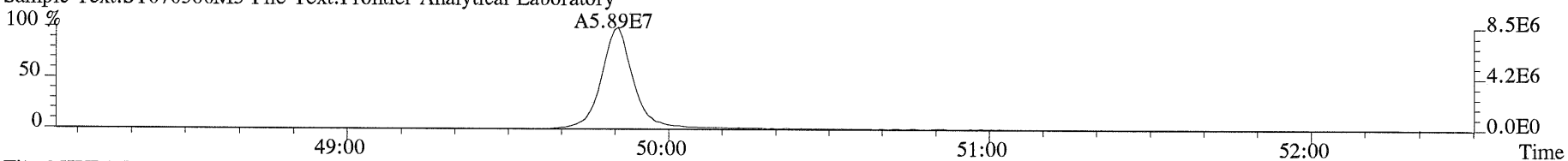
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



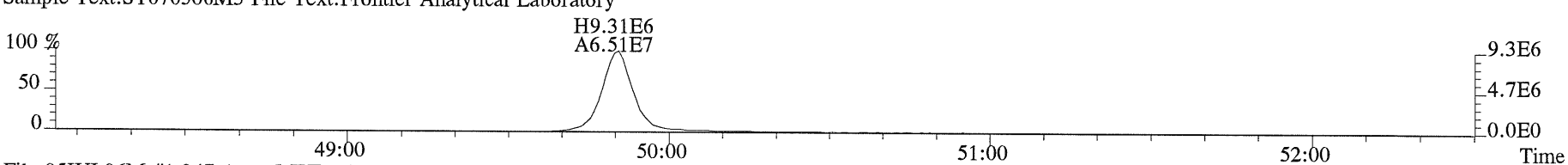
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



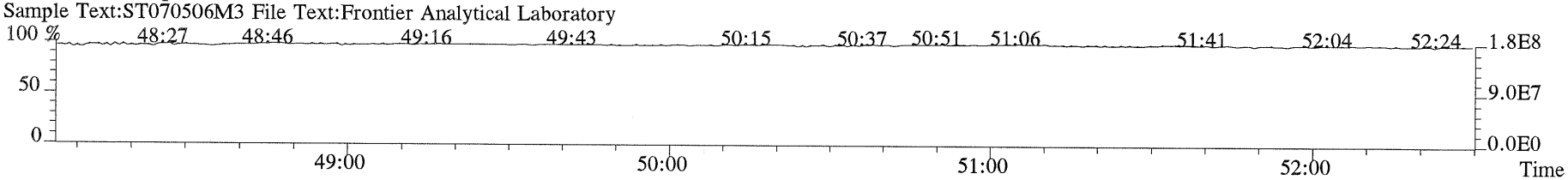
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



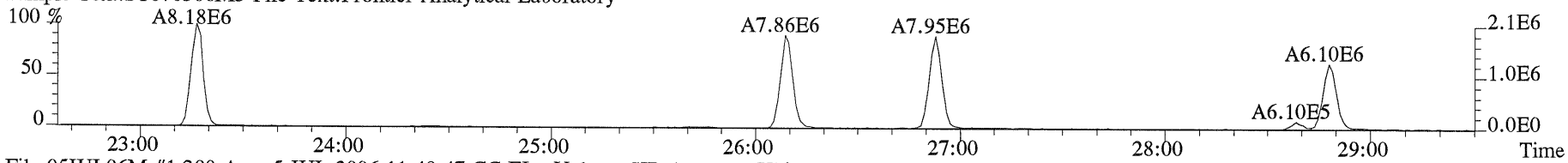
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



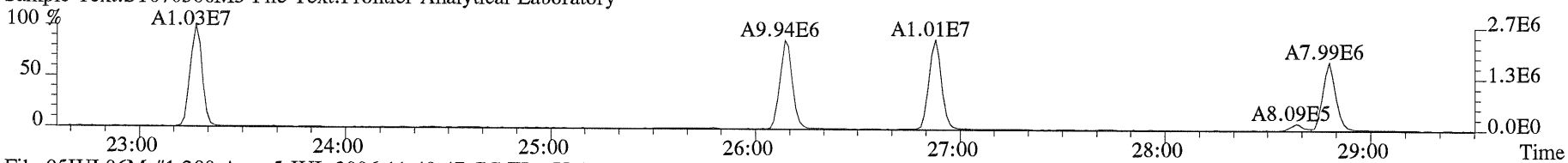
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



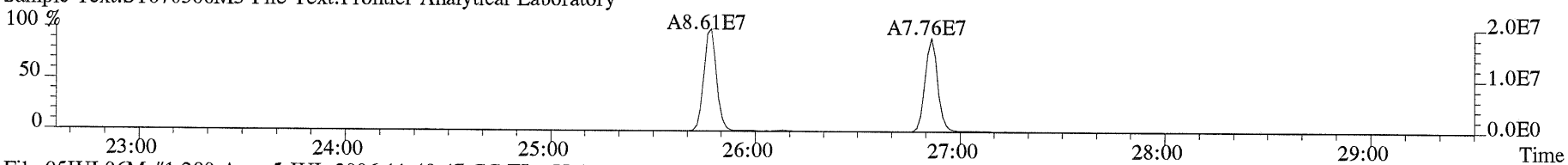
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



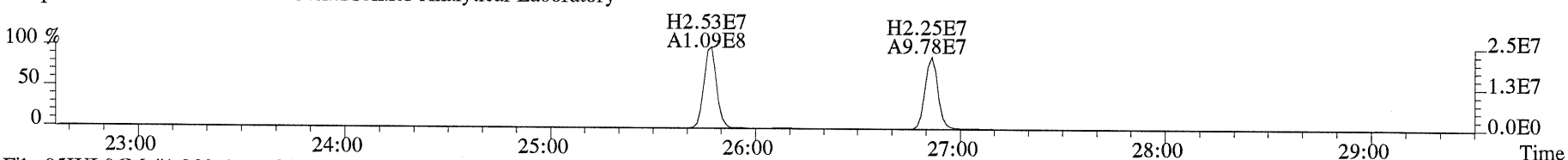
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



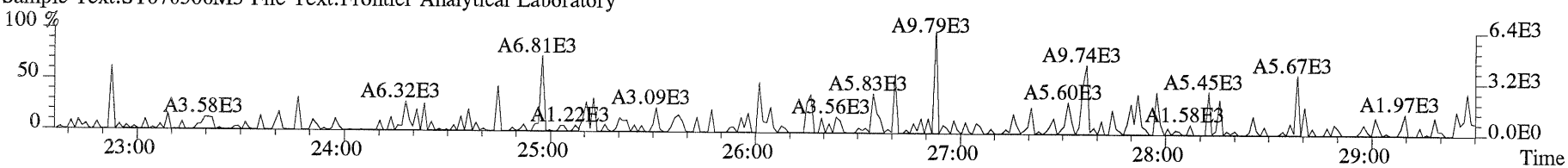
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



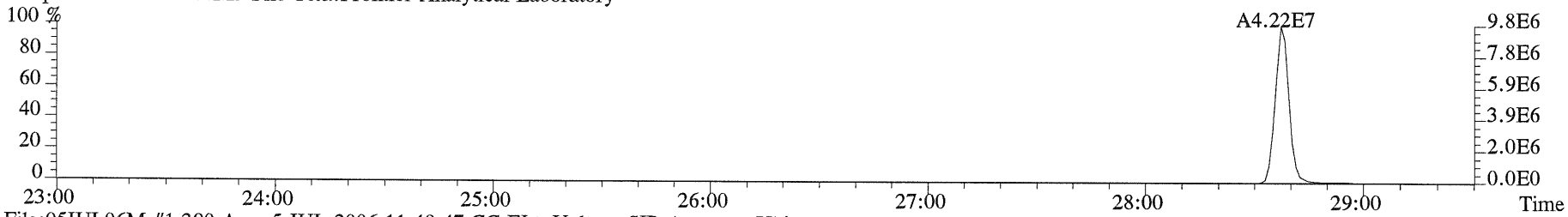
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



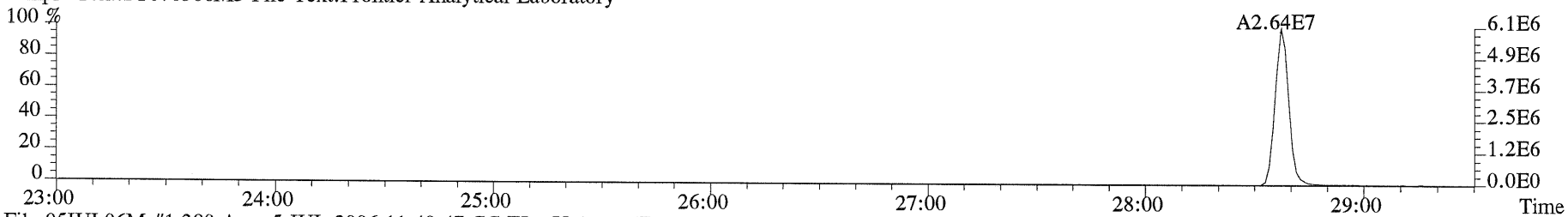
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



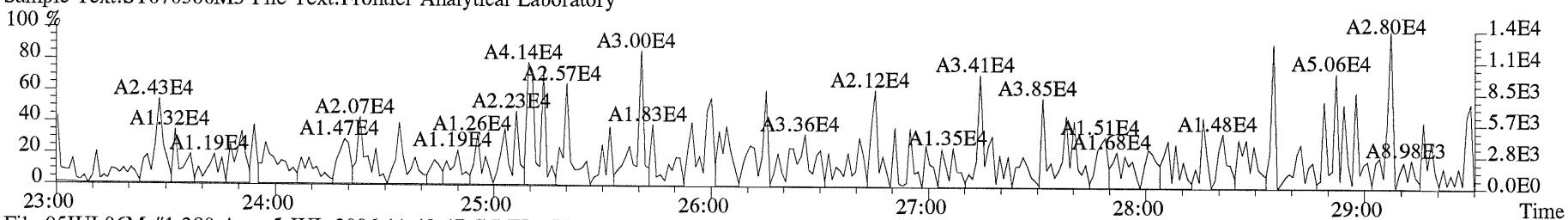
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



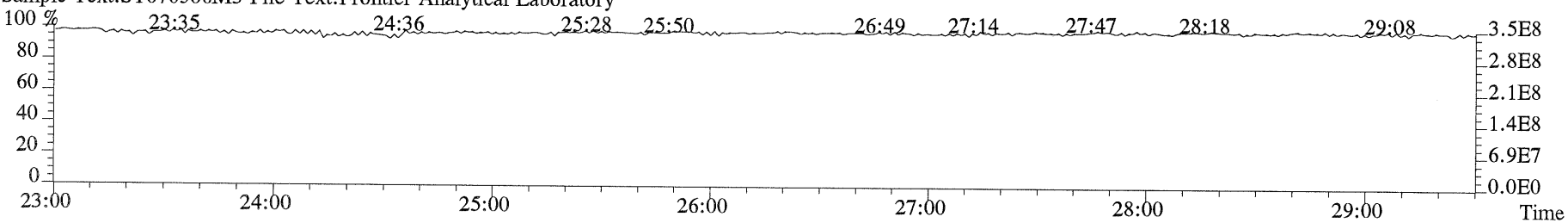
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



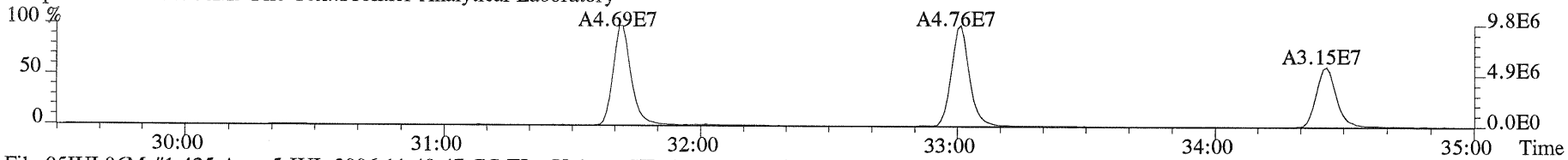
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



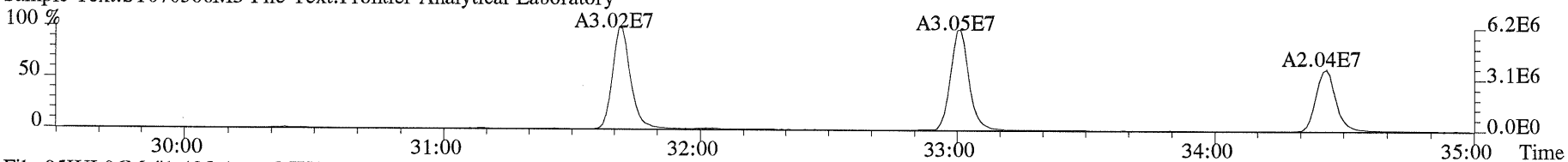
File:05JUL06M #1-390 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



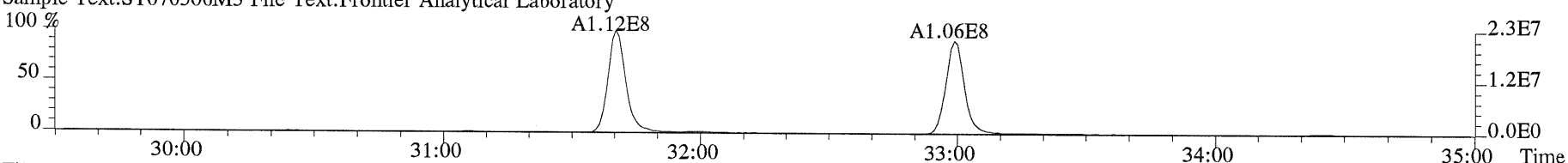
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



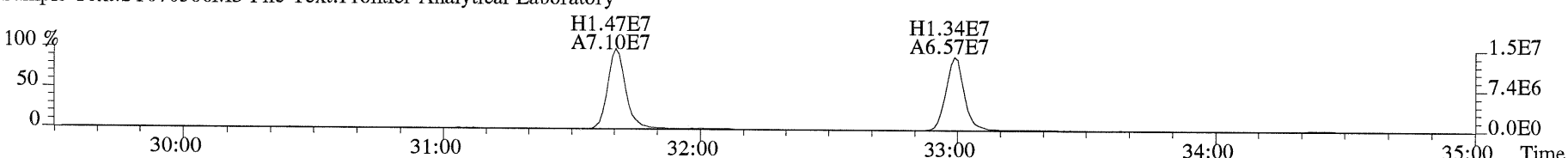
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



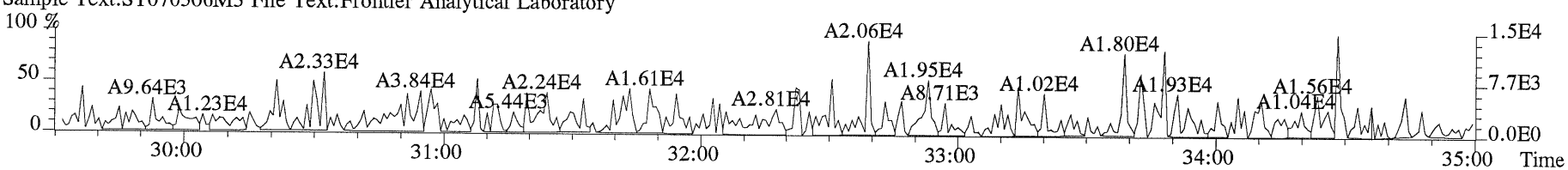
File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory

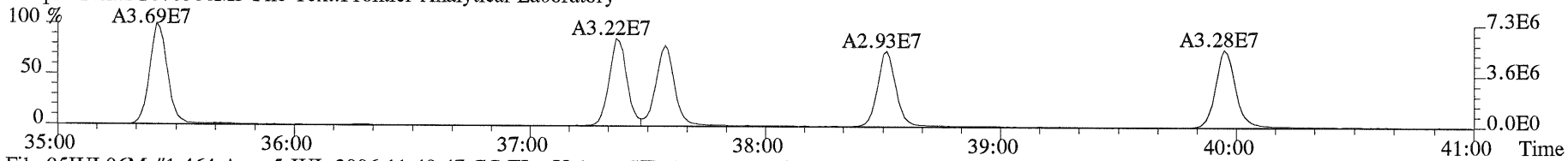


File:05JUL06M #1-425 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory

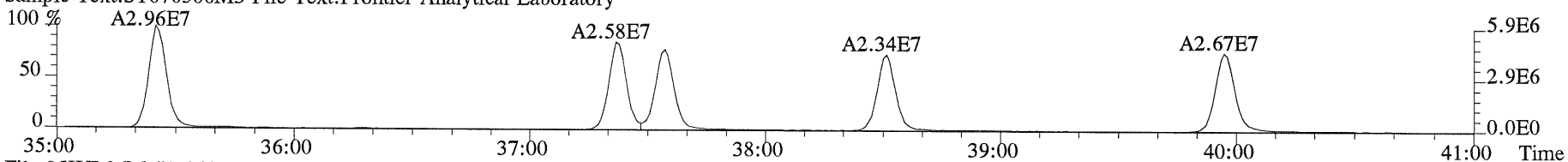


518

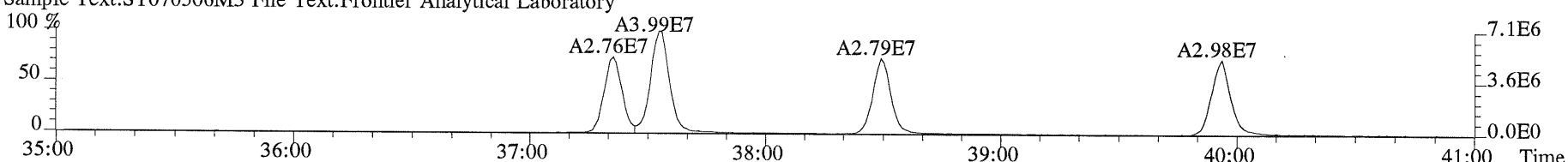
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



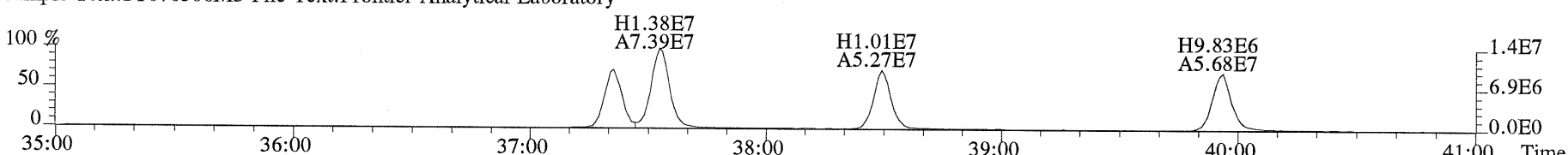
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



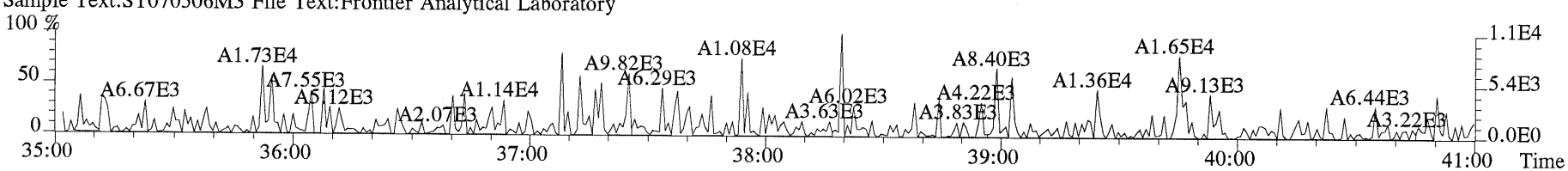
File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory

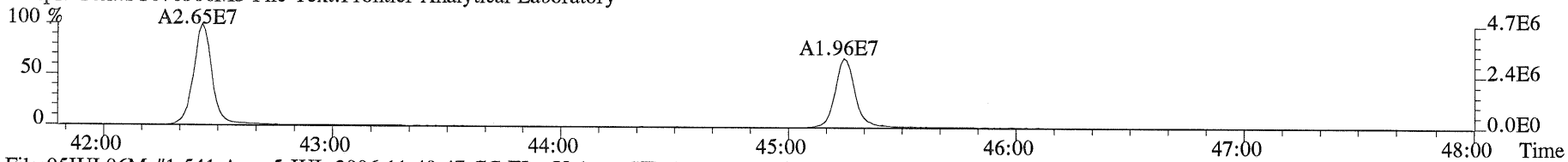


File:05JUL06M #1-464 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory

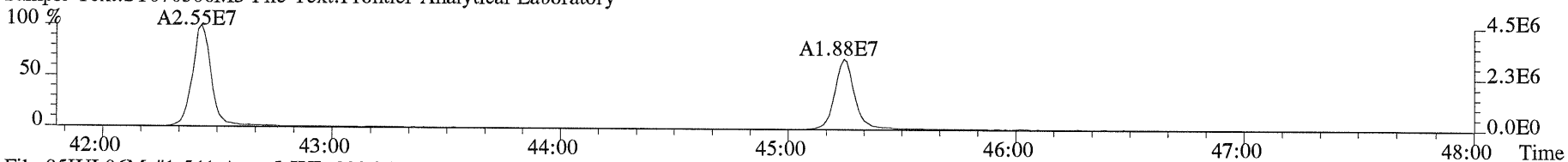


Klamath River Sediment Study

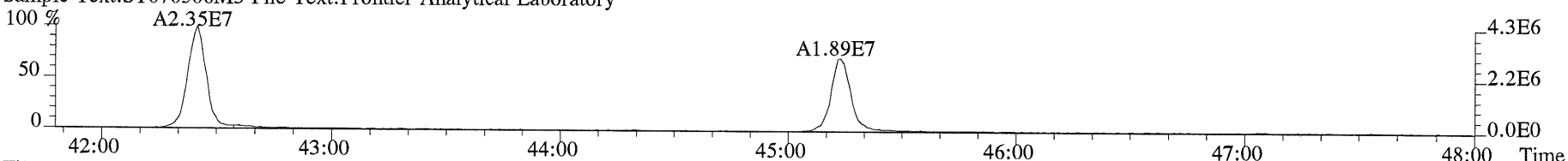
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



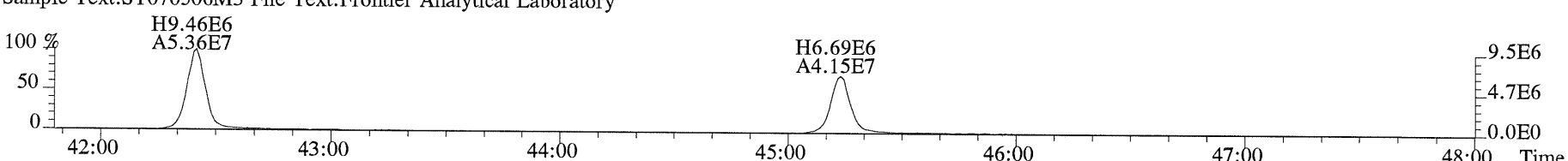
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



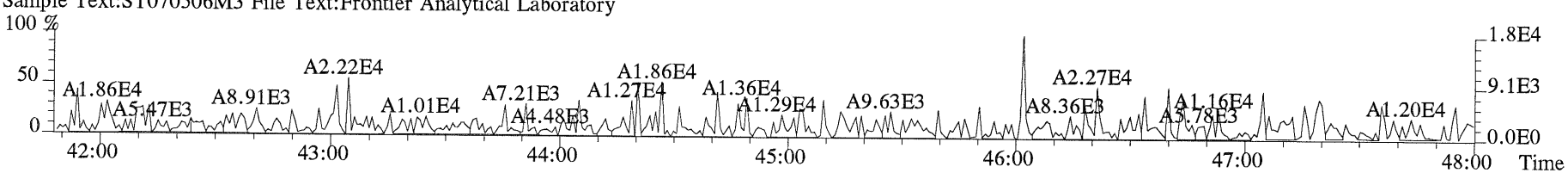
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



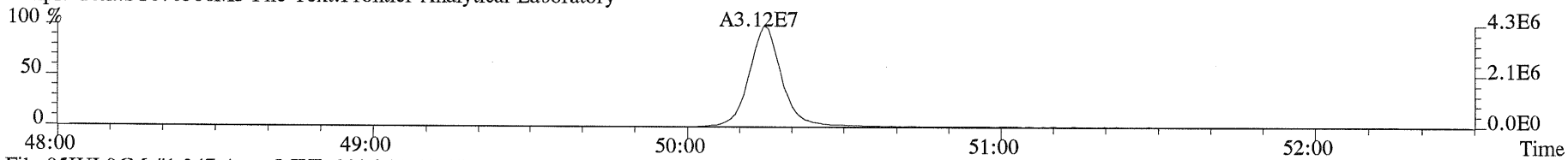
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



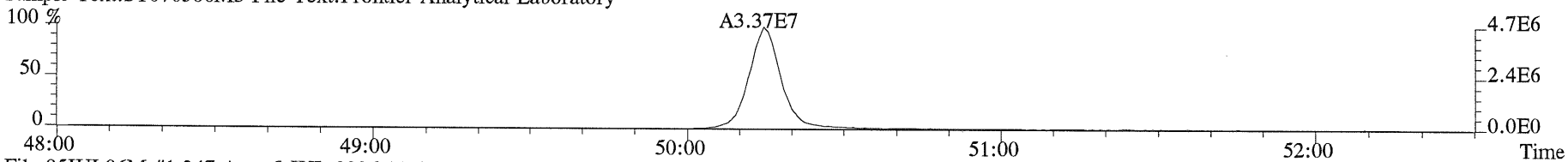
File:05JUL06M #1-541 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



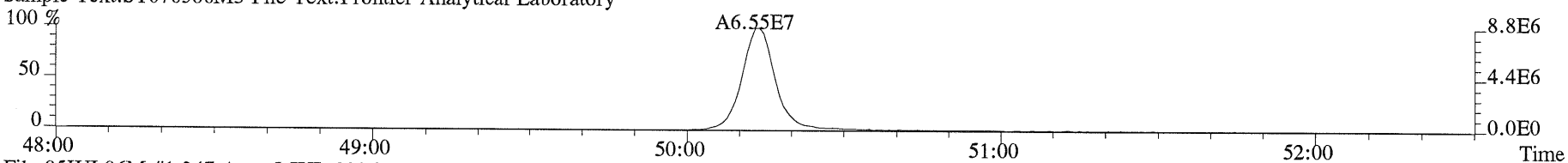
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



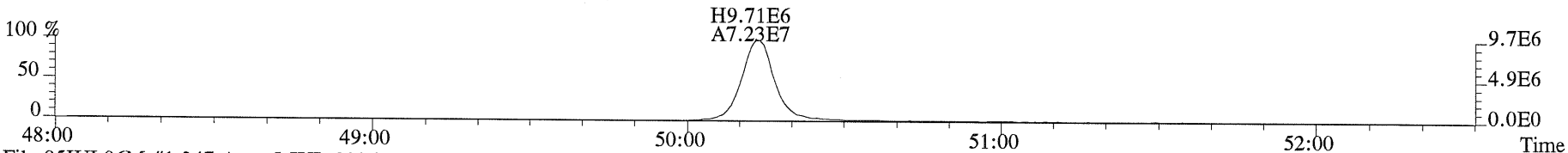
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



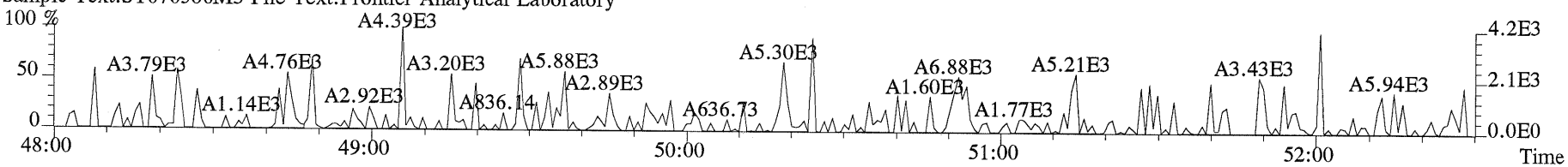
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



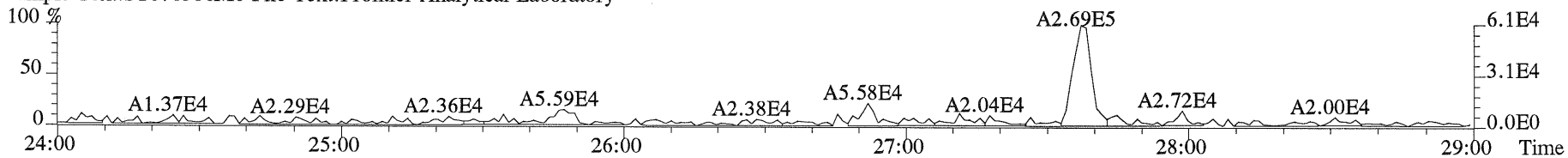
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



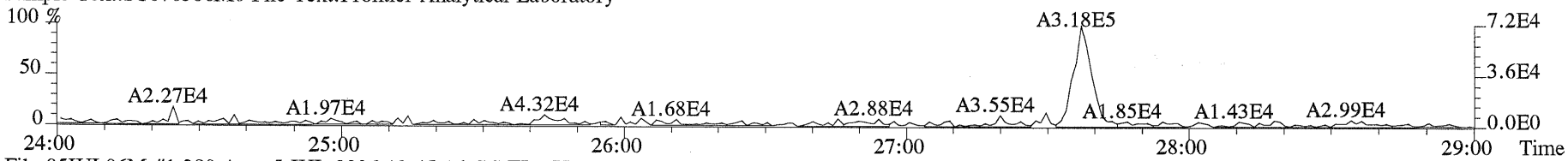
File:05JUL06M #1-347 Acq: 5-JUL-2006 11:49:47 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M3 File Text:Frontier Analytical Laboratory



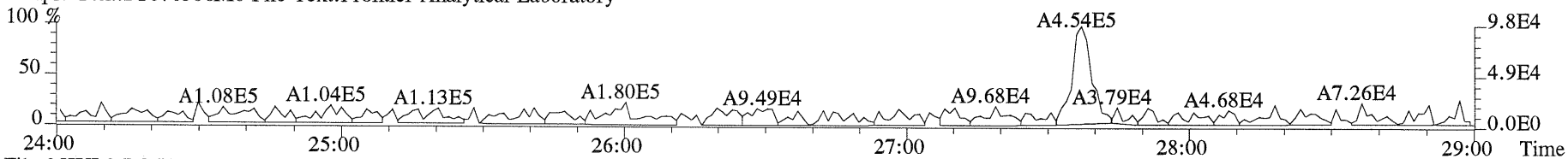
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



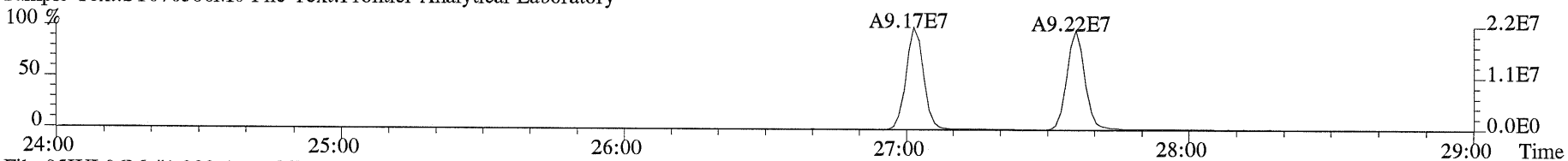
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



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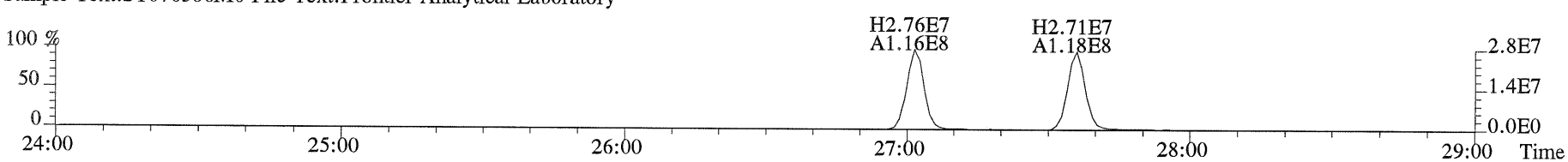
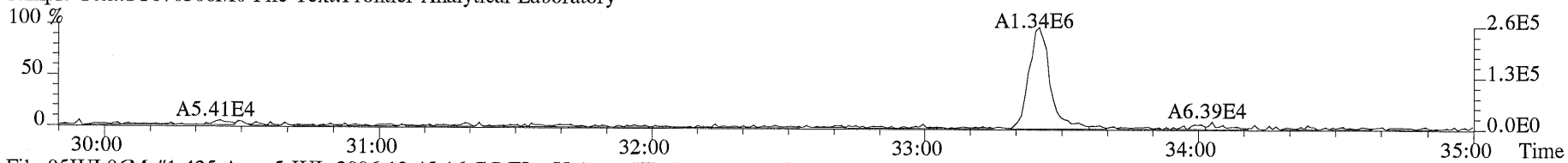
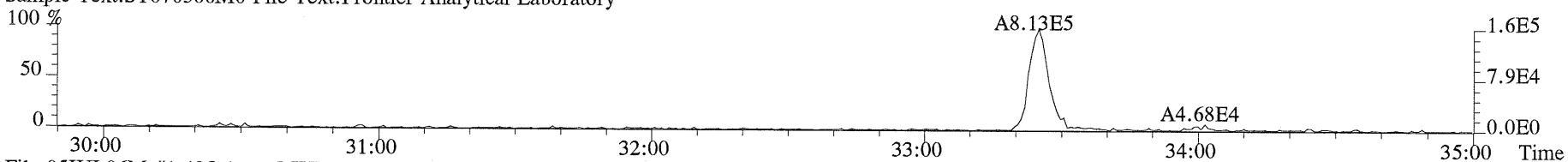
333.9339 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



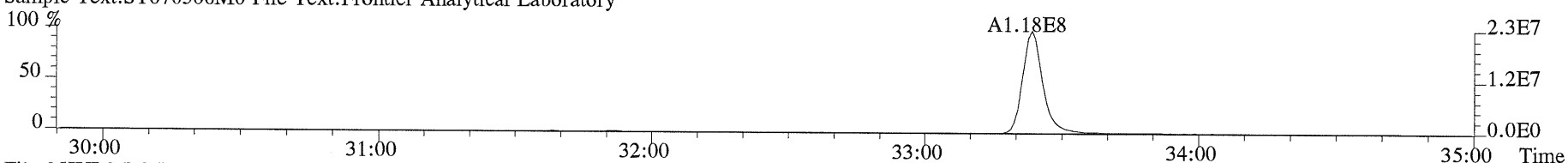
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



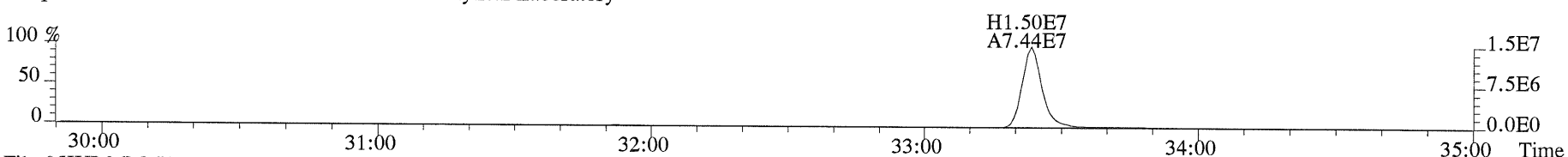
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



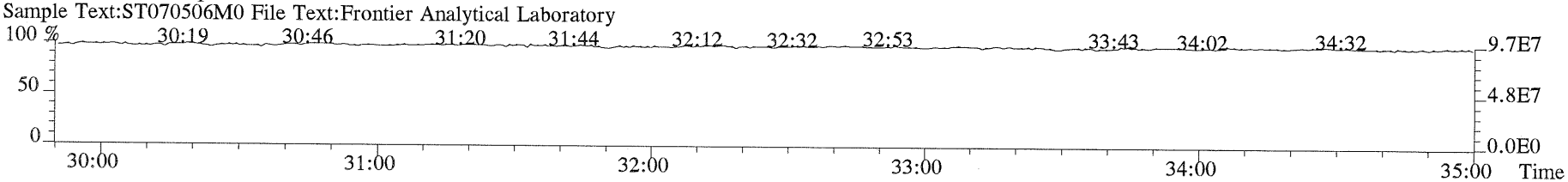
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



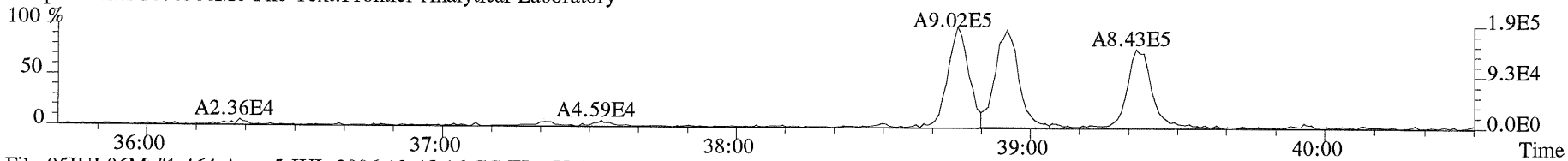
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



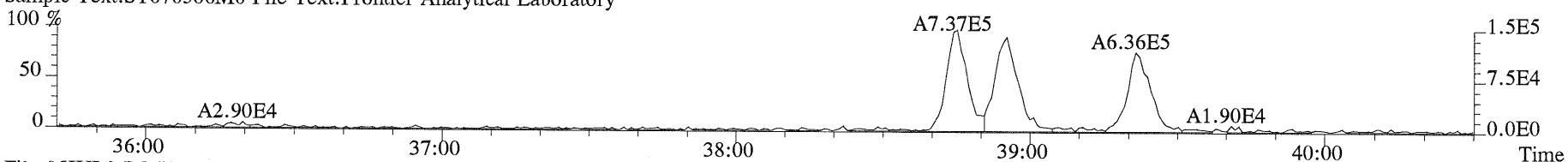
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:2 F:2 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



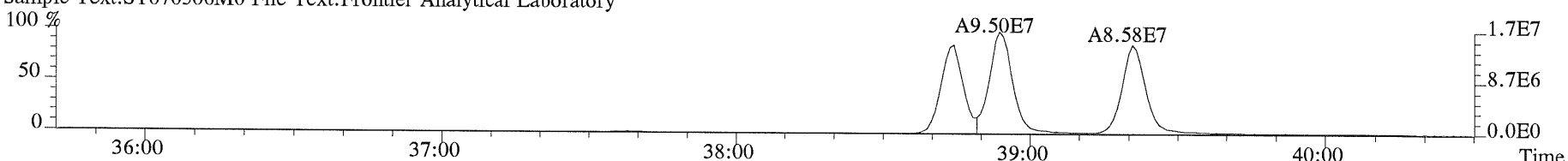
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



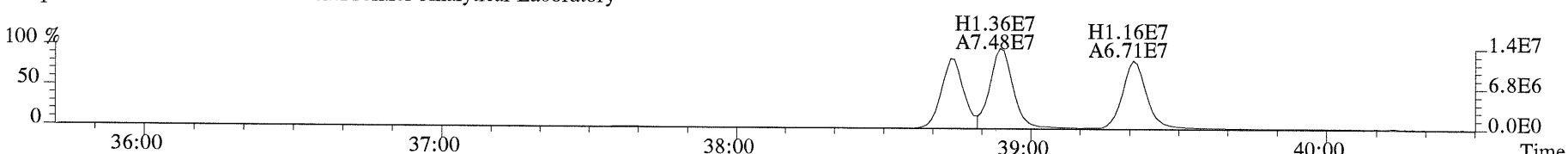
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



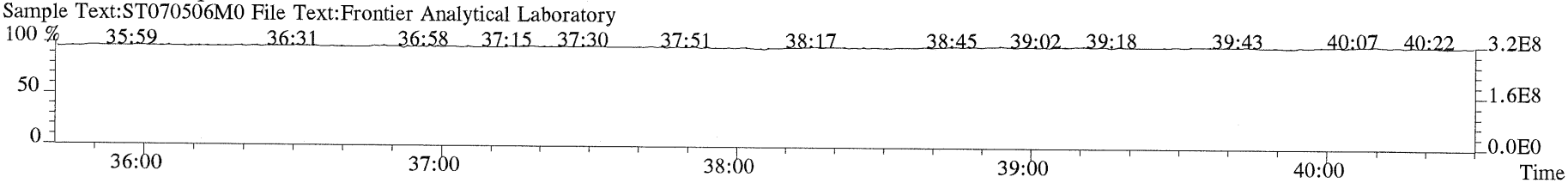
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



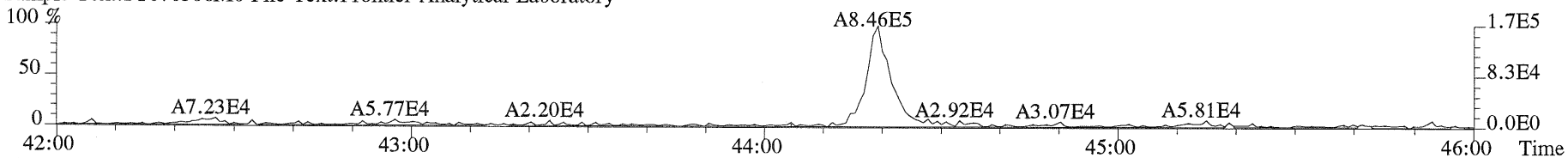
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



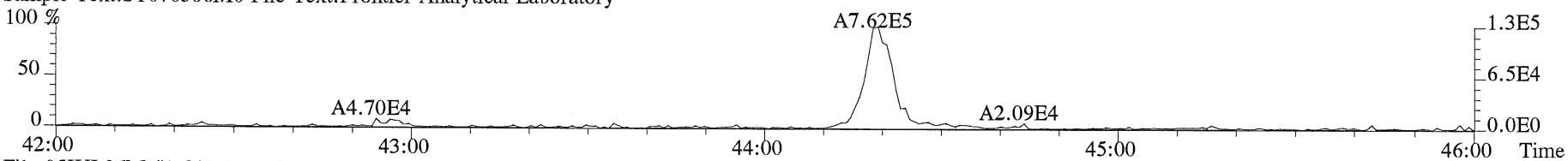
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:2 F:3 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



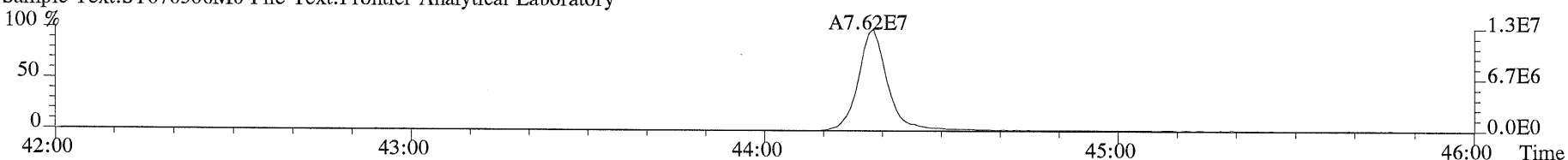
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



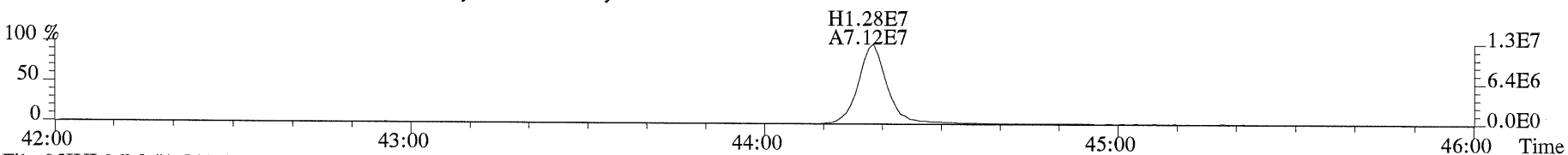
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



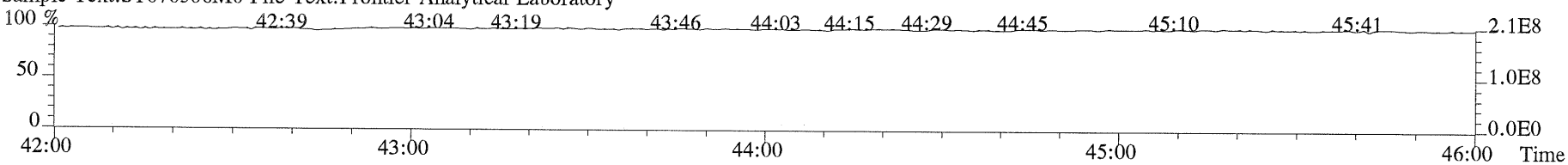
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



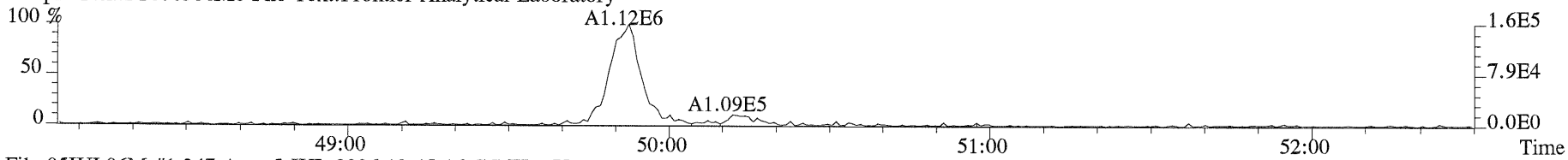
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



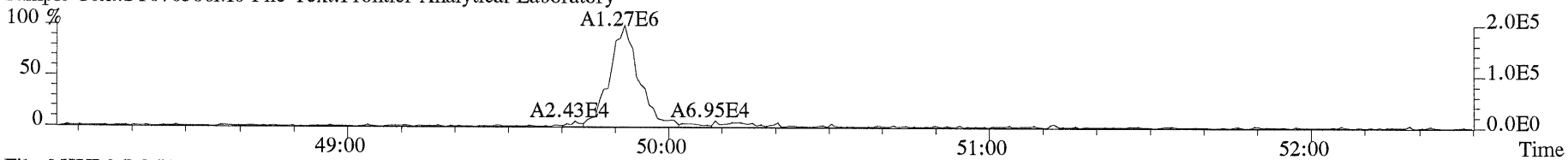
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:2 F:4 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



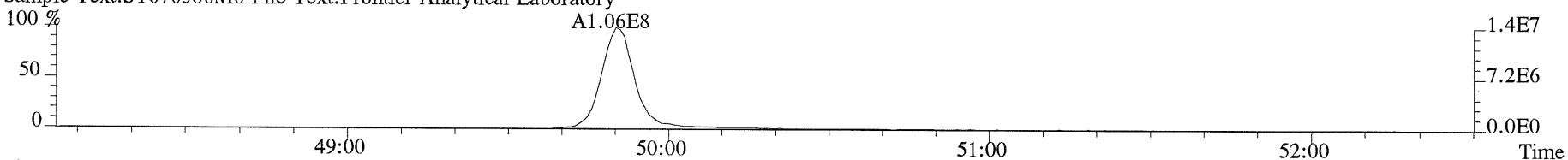
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



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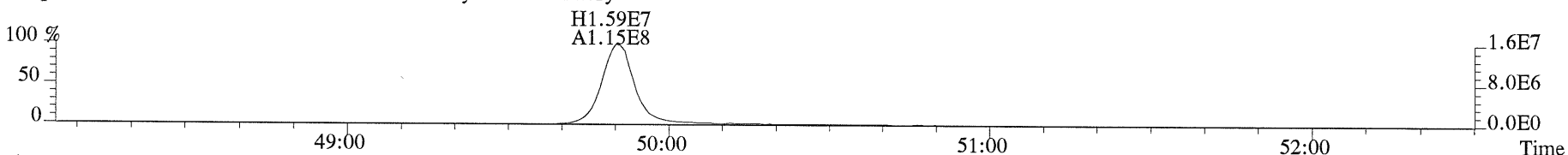
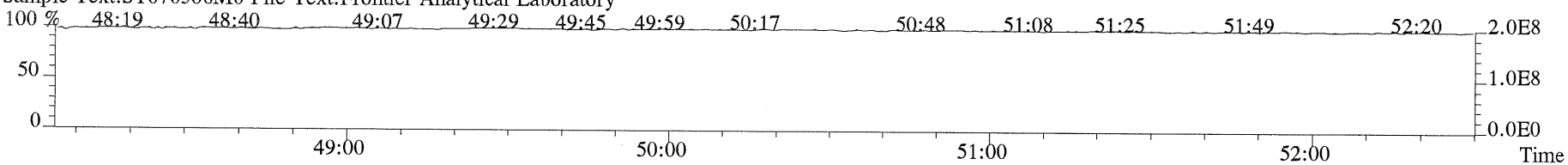
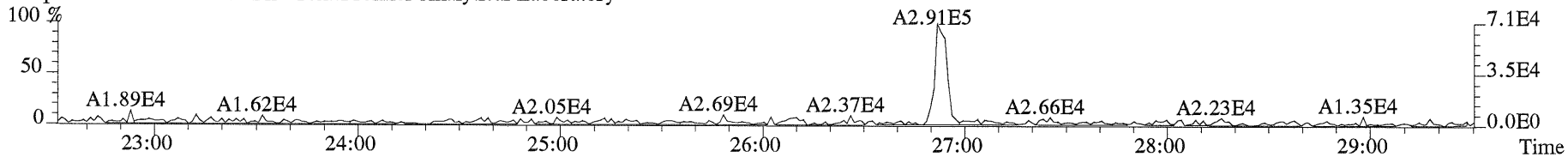
471.7750 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



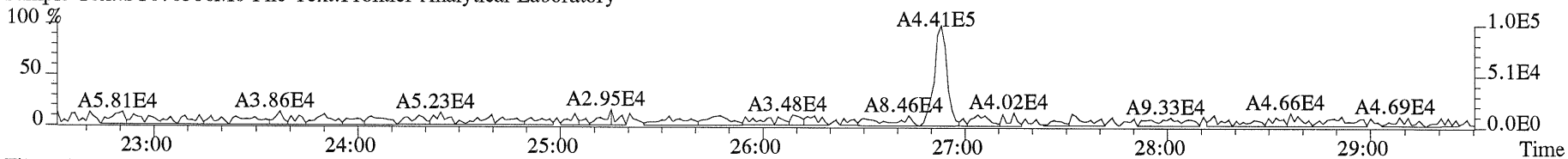
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:2 F:5 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



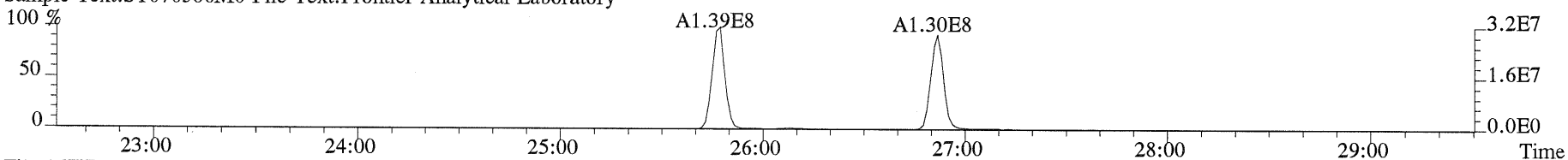
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



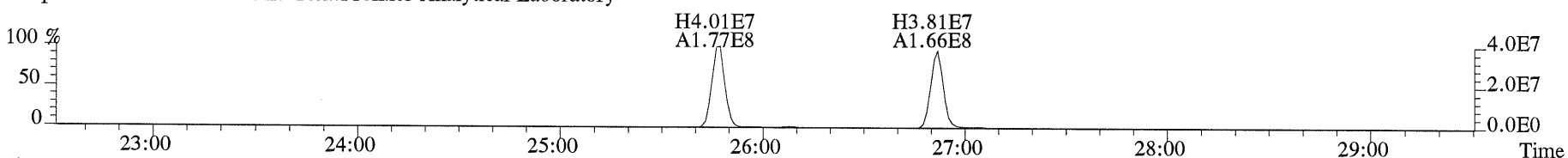
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



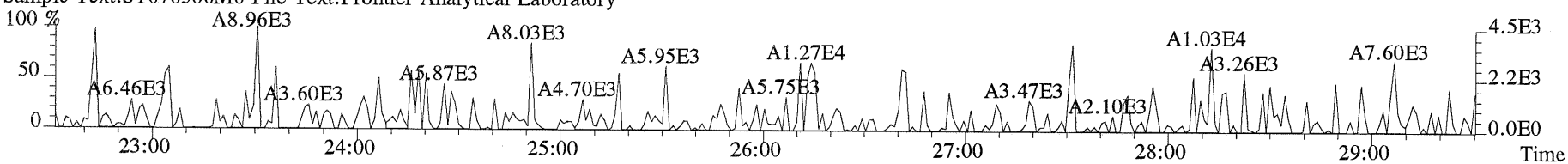
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



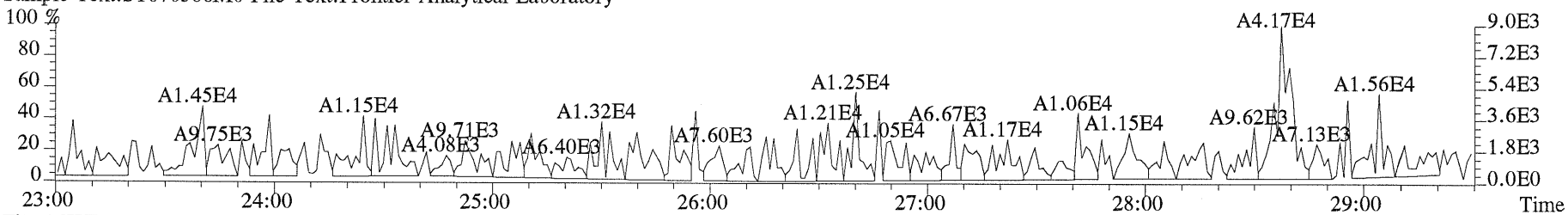
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



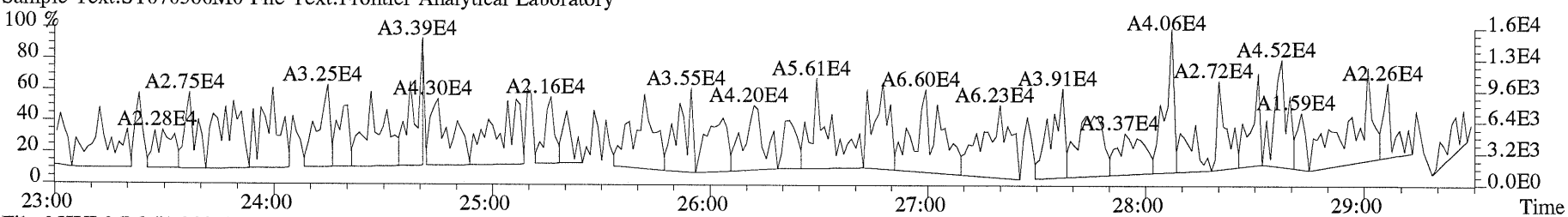
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



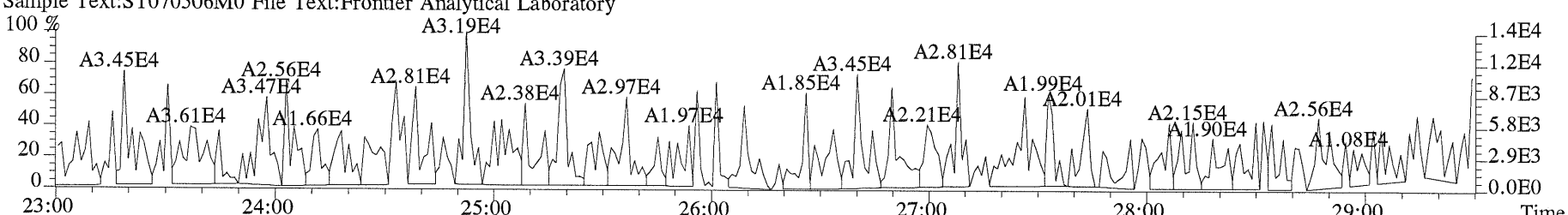
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



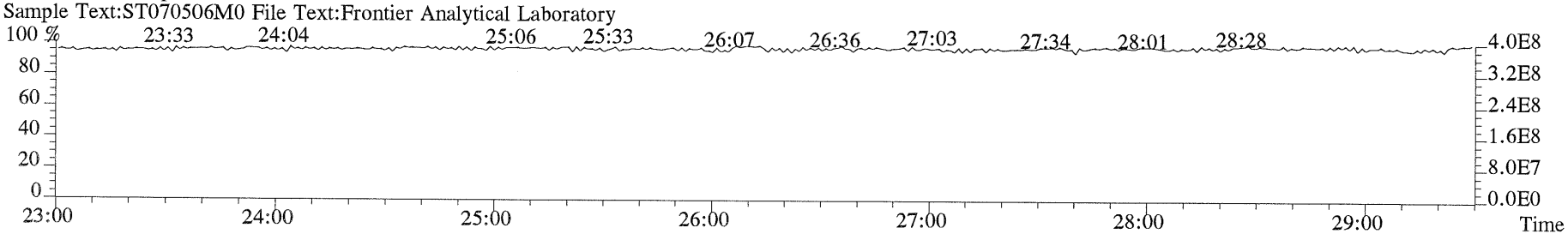
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



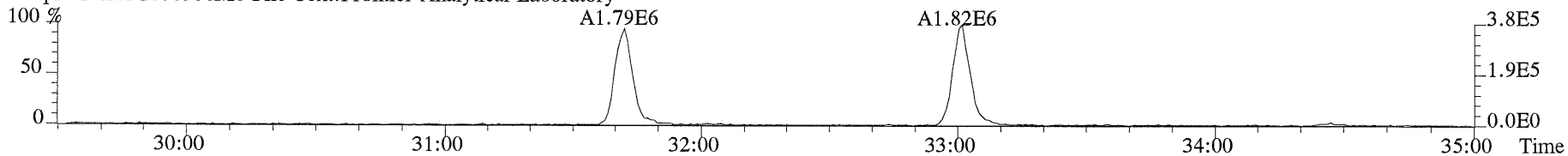
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



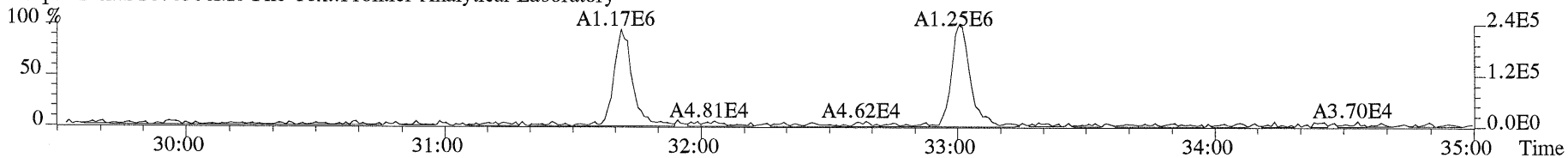
File:05JUL06M #1-390 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:2 Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



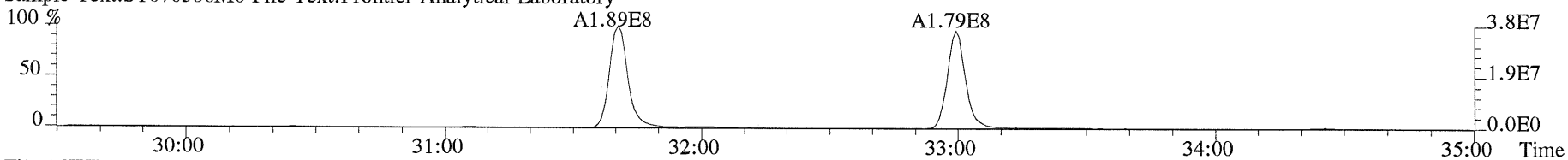
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



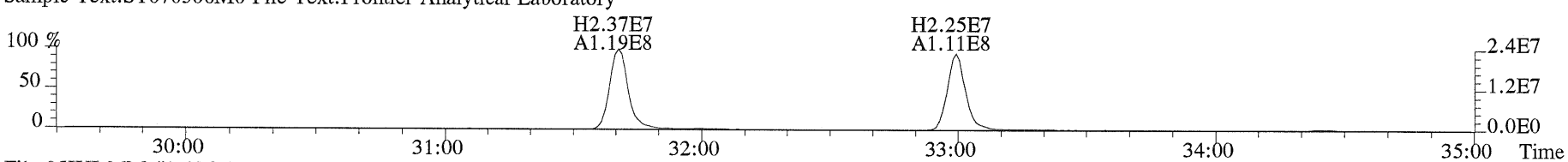
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



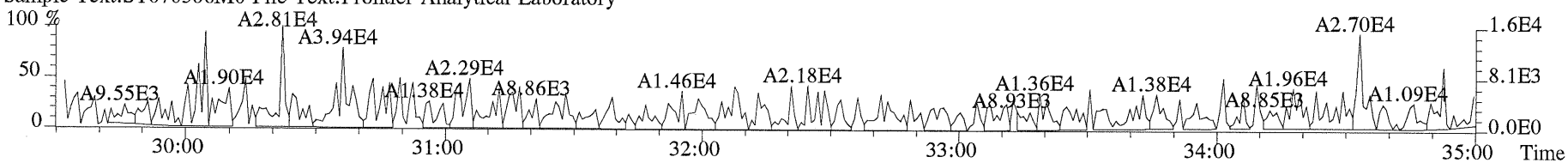
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



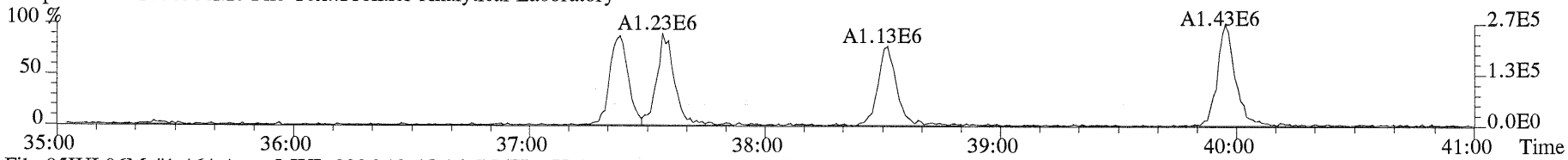
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



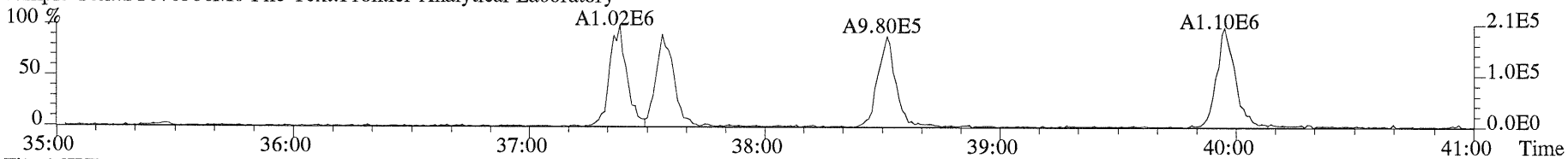
File:05JUL06M #1-425 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:2 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



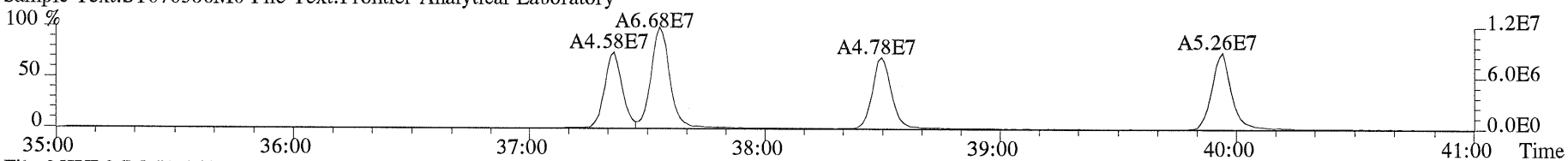
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



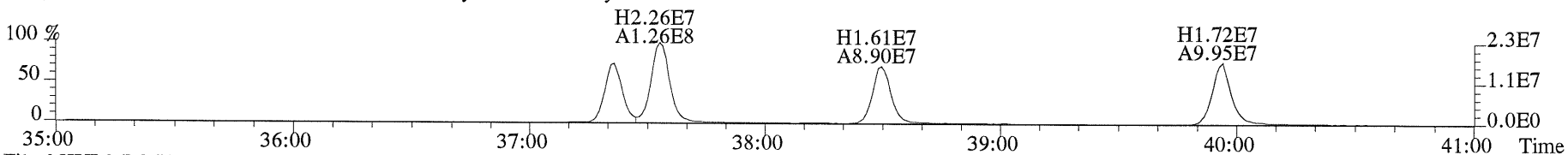
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



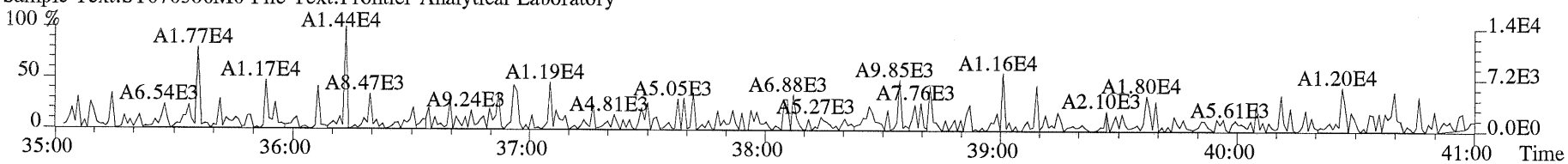
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



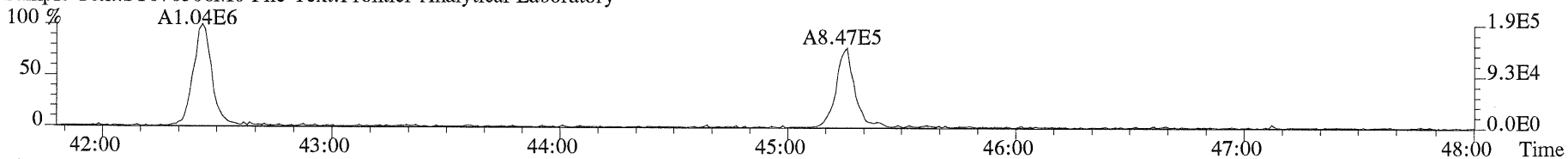
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



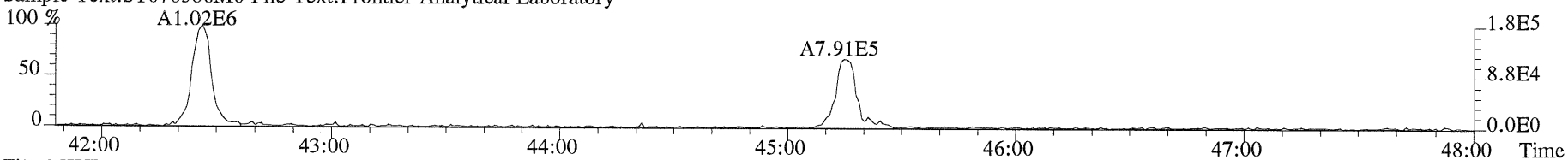
File:05JUL06M #1-464 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:2 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



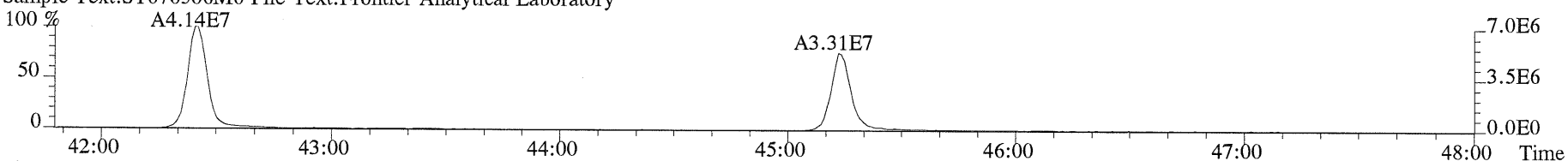
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



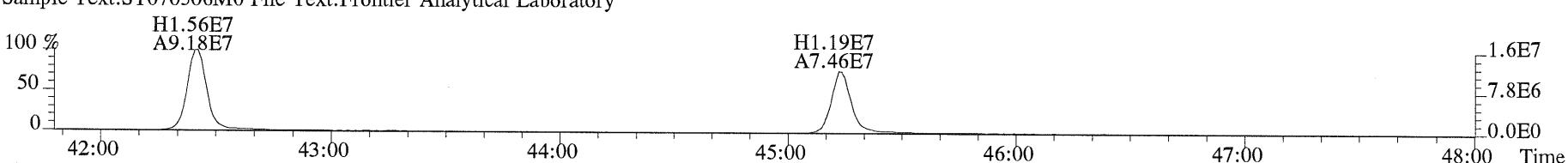
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



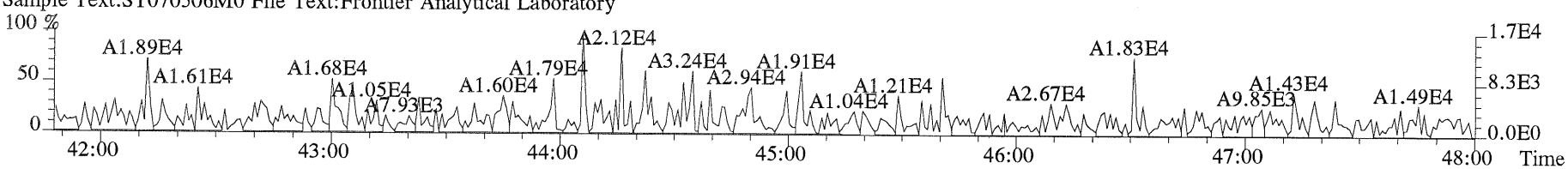
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



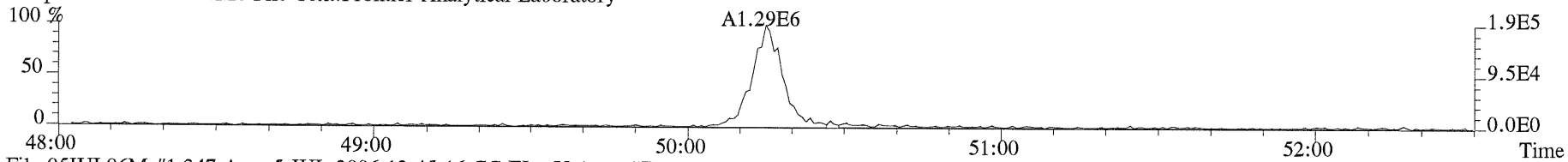
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



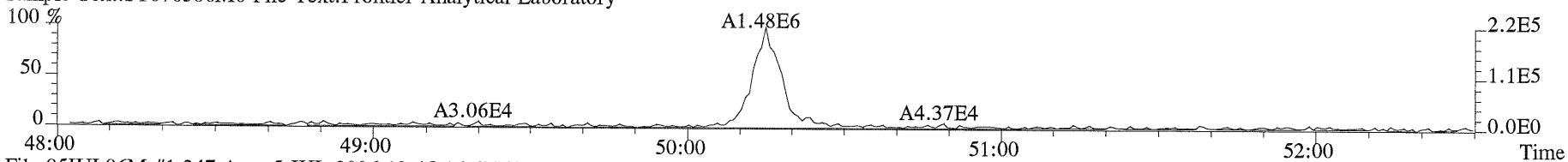
File:05JUL06M #1-541 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:2 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



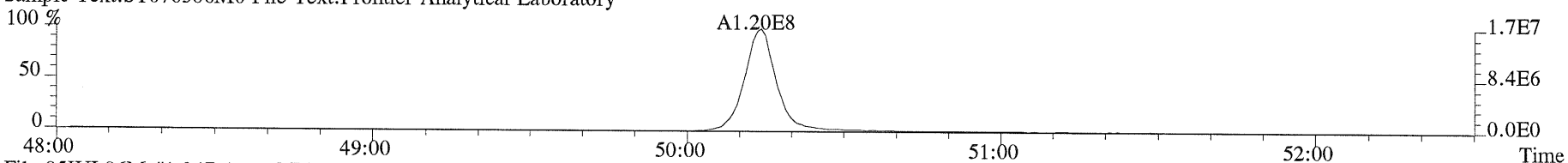
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



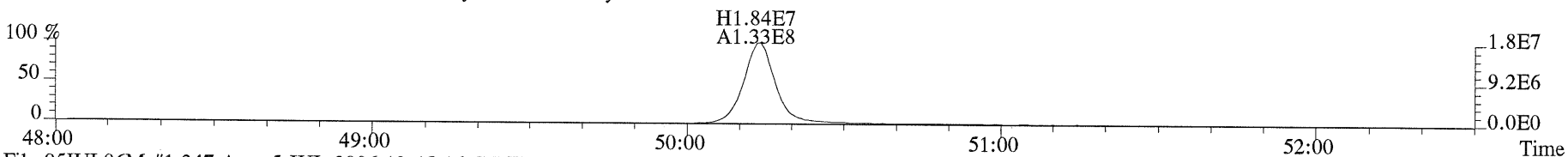
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



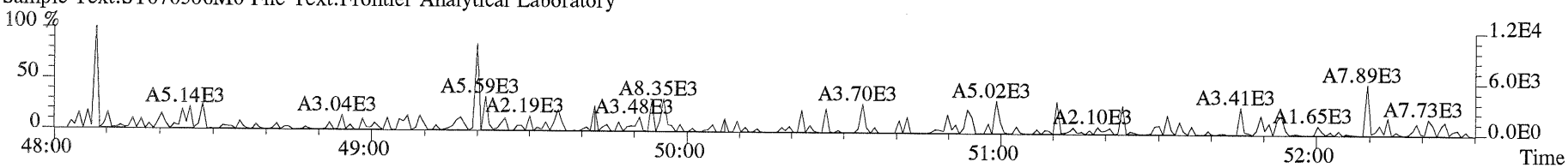
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



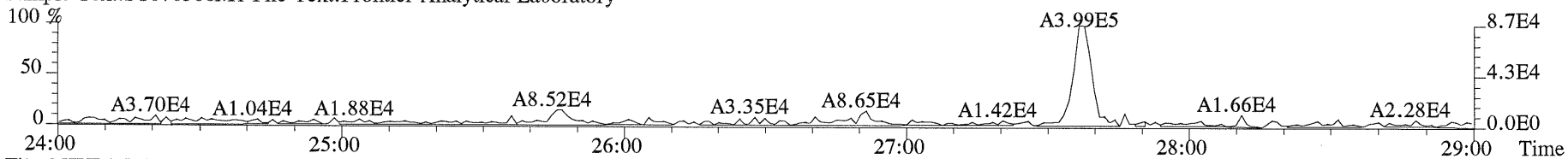
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



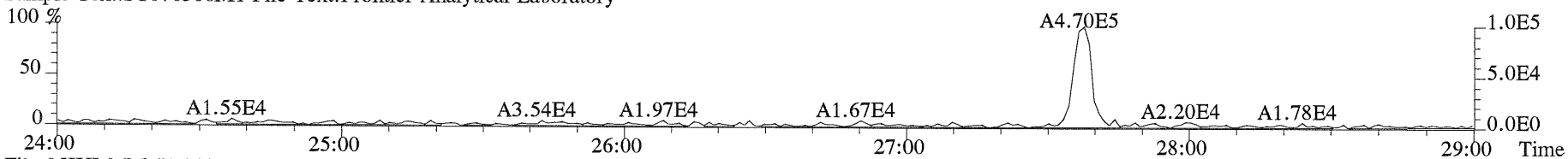
File:05JUL06M #1-347 Acq: 5-JUL-2006 12:45:16 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:2 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M0 File Text:Frontier Analytical Laboratory



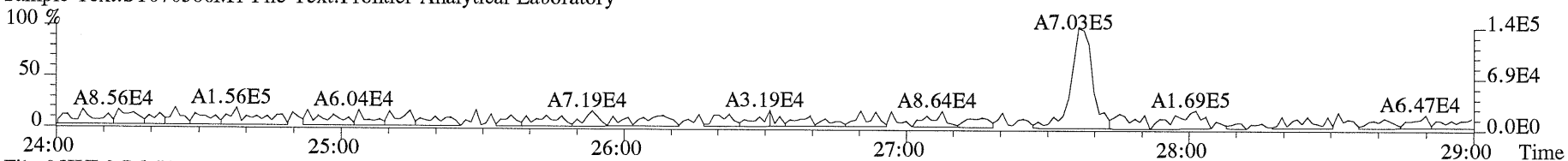
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



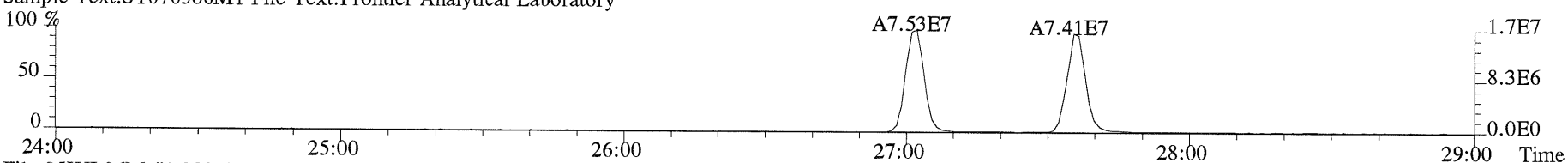
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



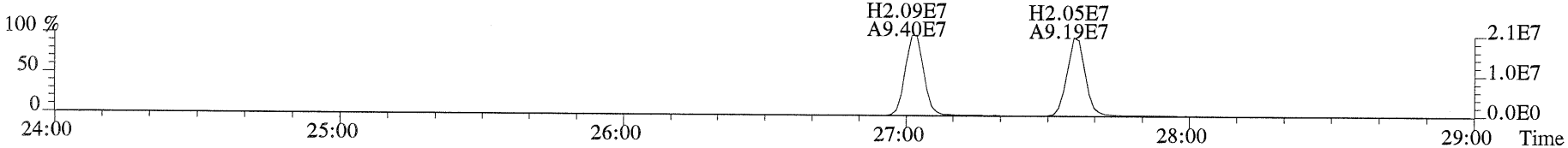
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

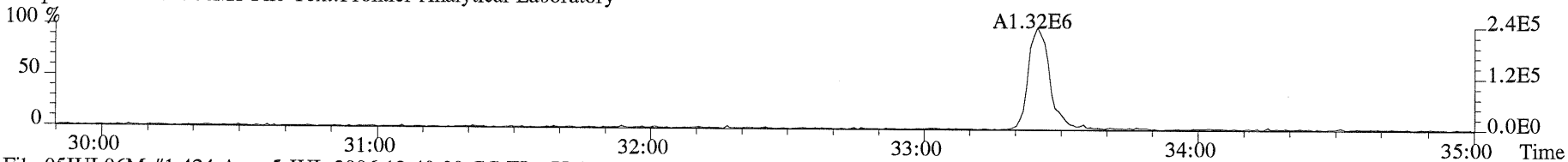


File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

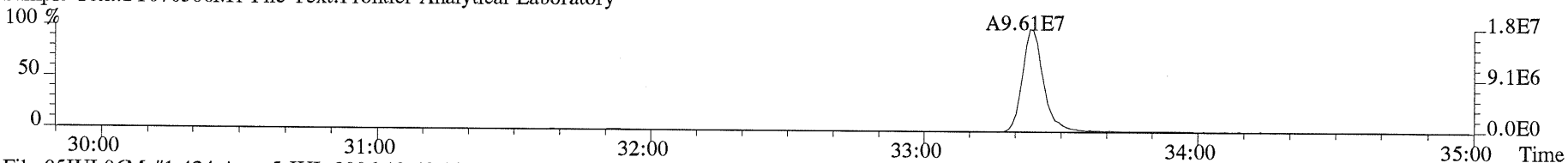


File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

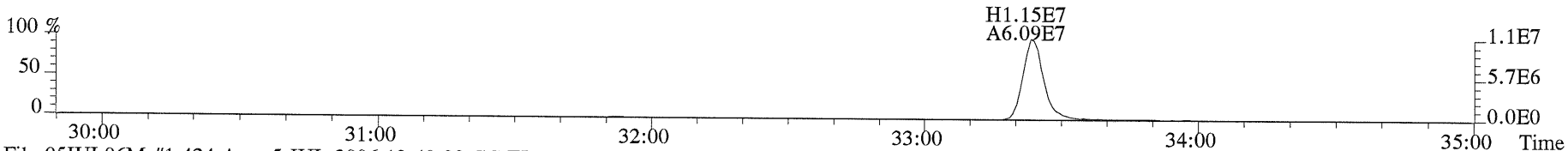
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



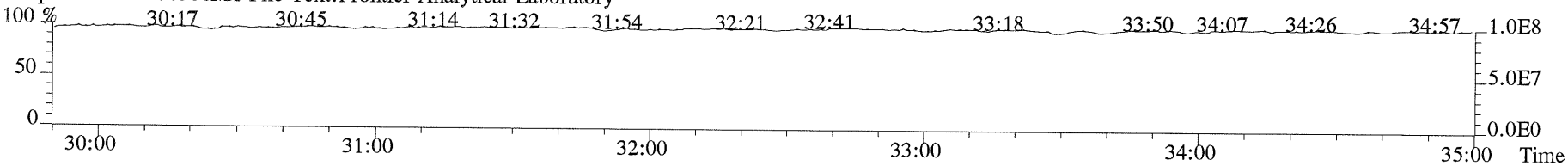
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



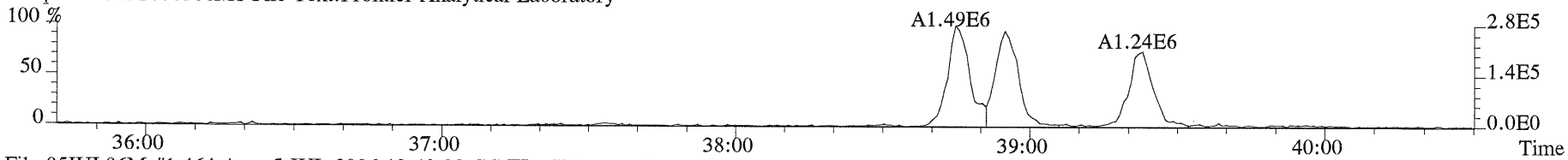
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



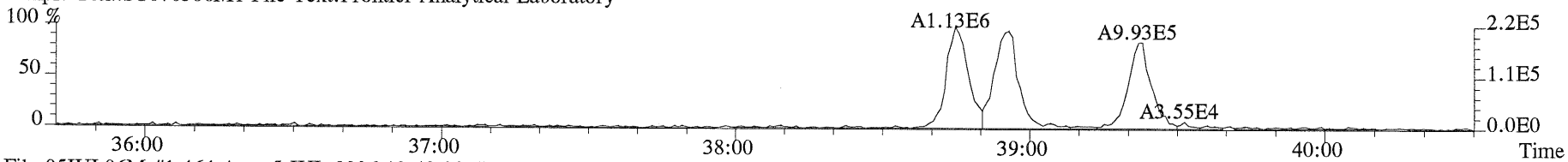
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:3 F:2 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



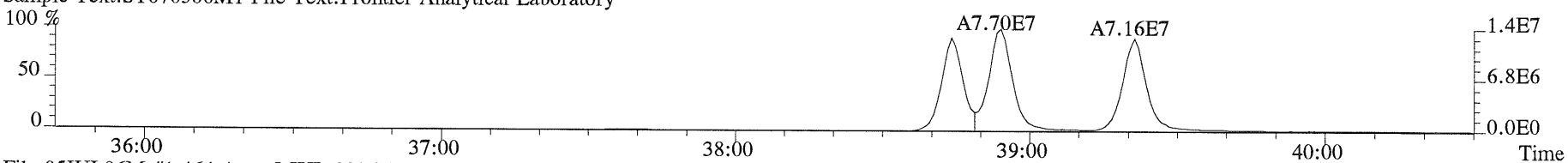
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



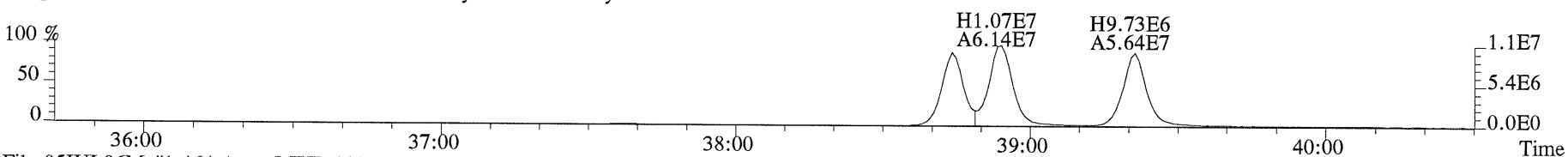
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



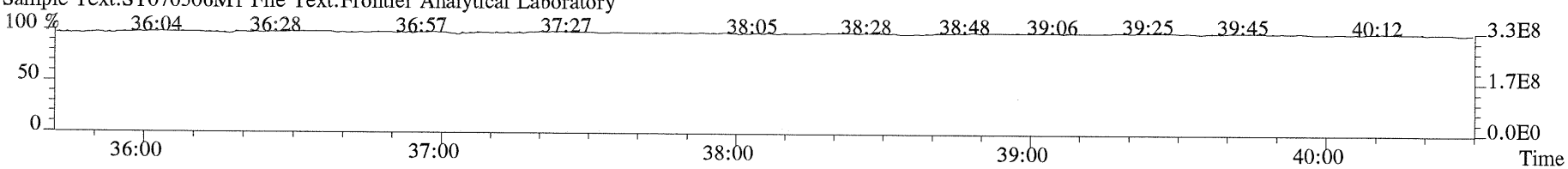
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



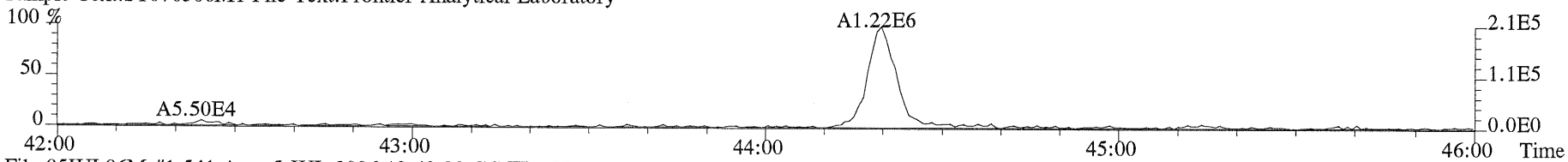
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



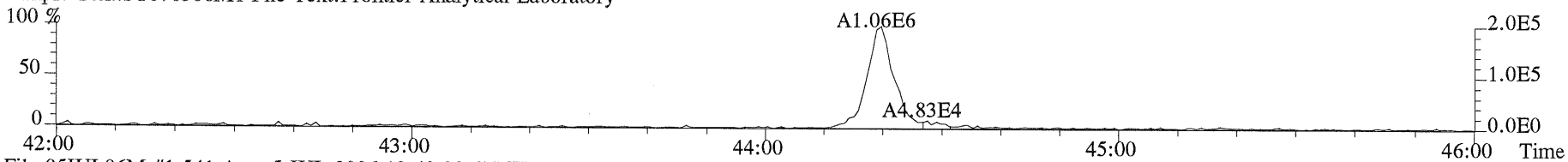
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:3 F:3 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



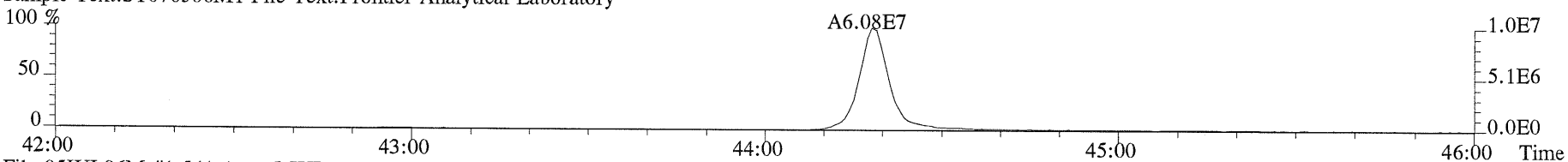
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



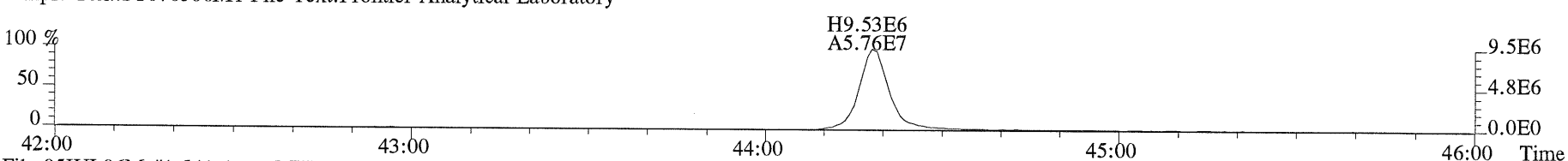
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



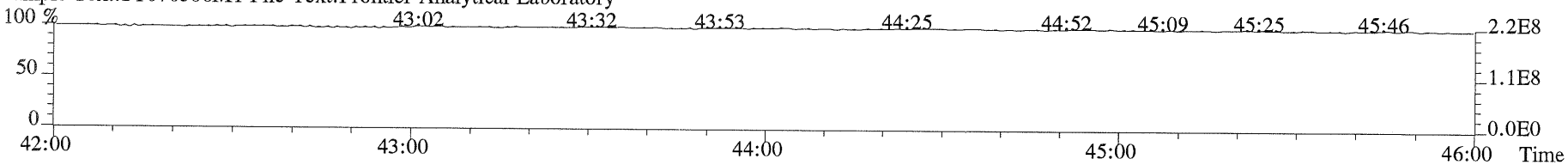
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



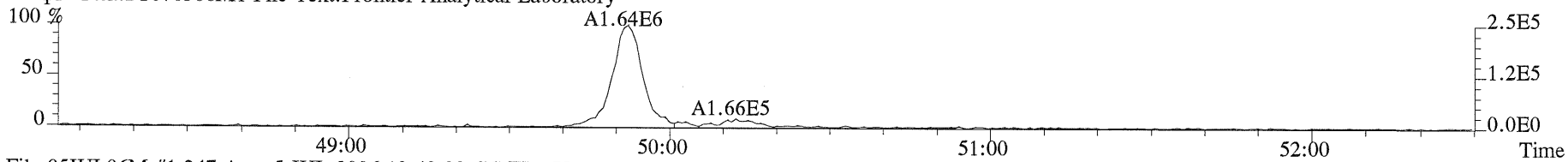
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



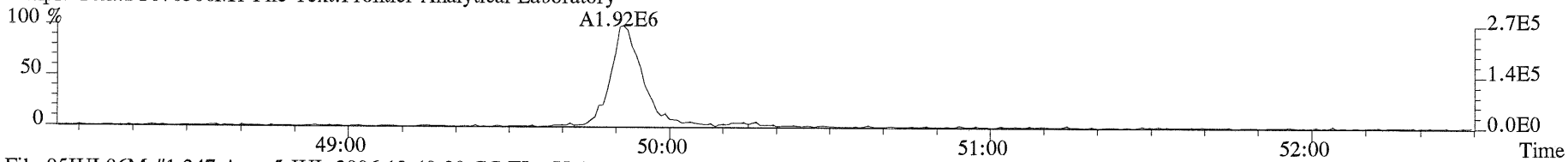
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:3 F:4 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



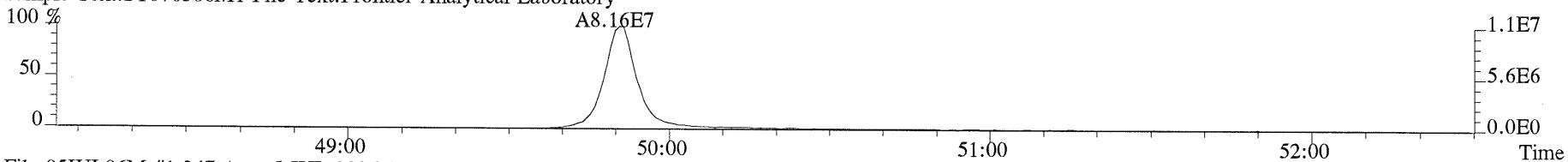
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

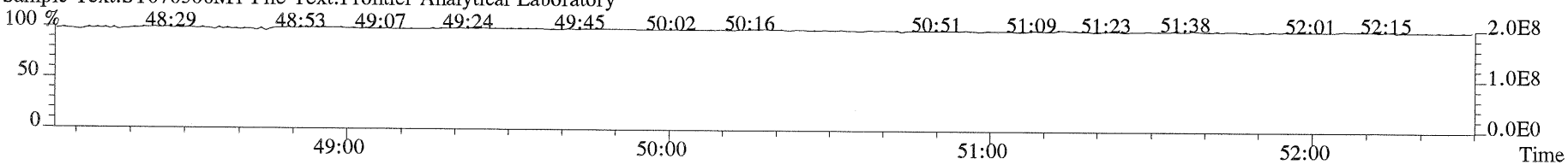


File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

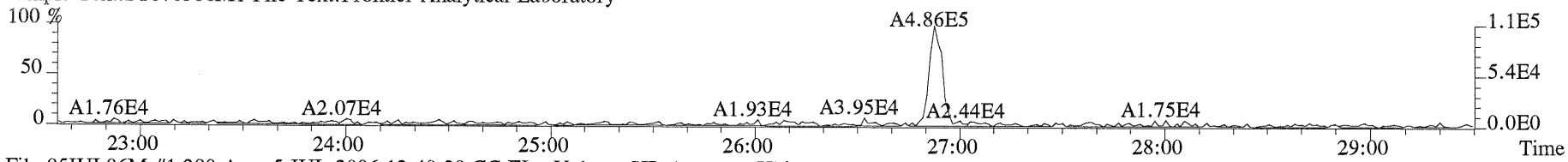


File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

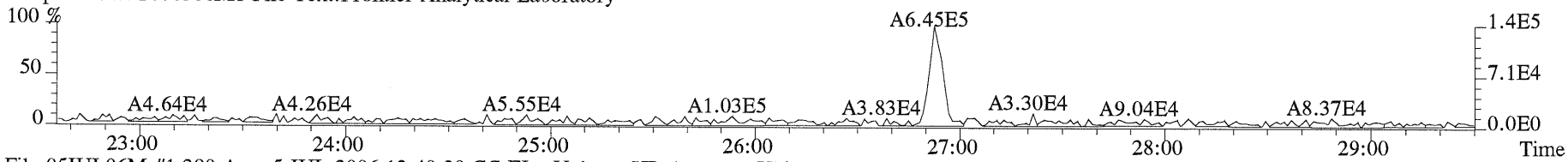
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:3 F:5 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



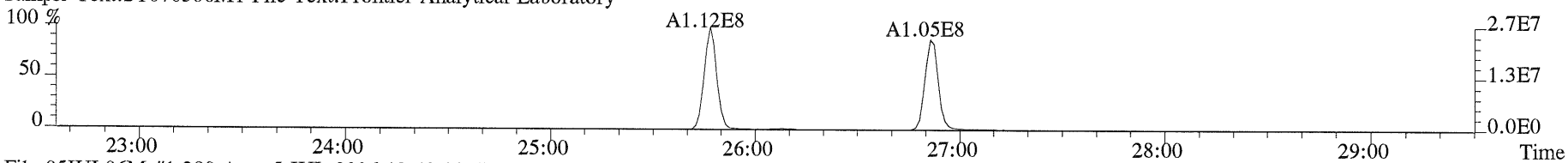
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



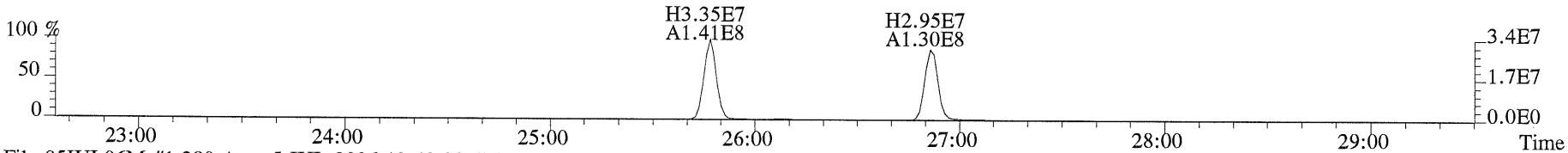
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



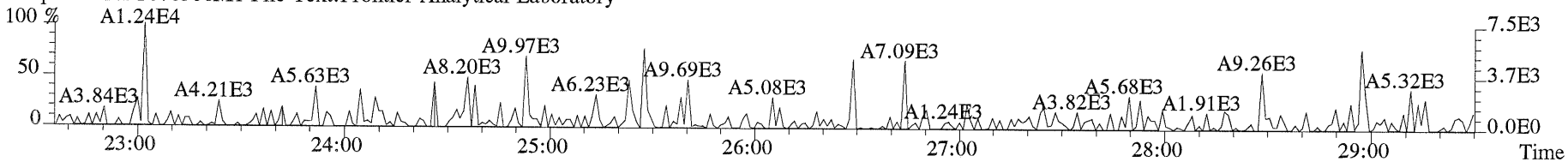
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

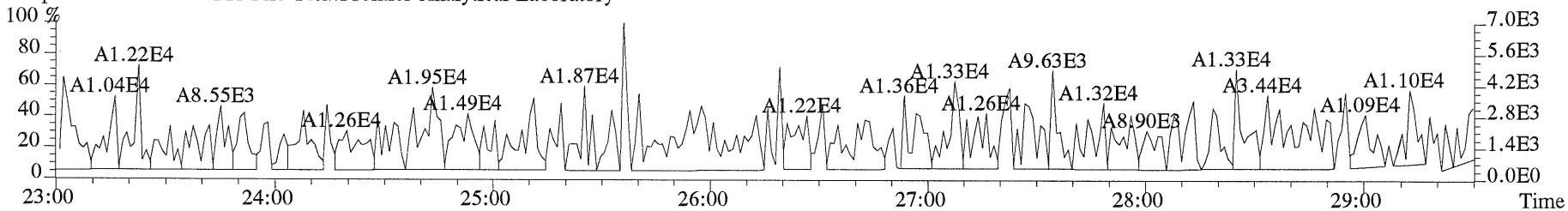


File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory

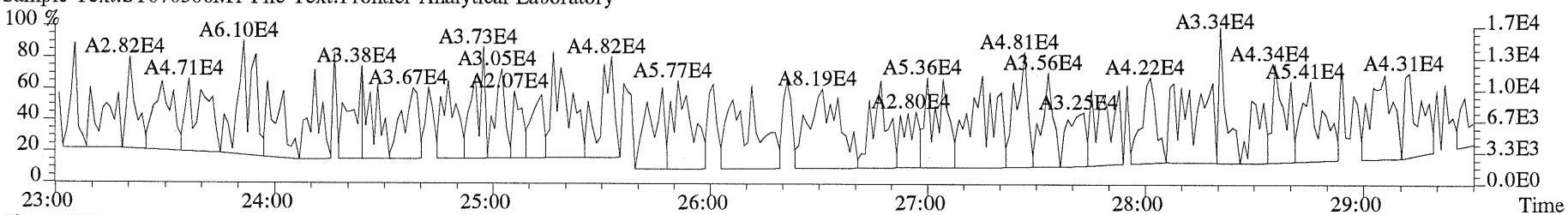


Klamath River Sediment Study

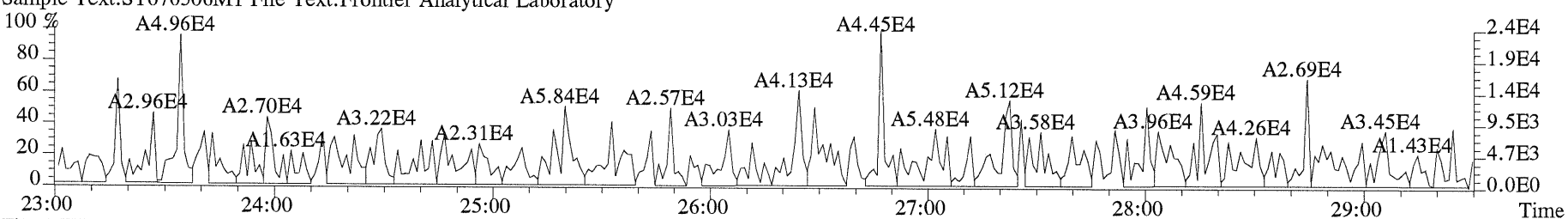
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



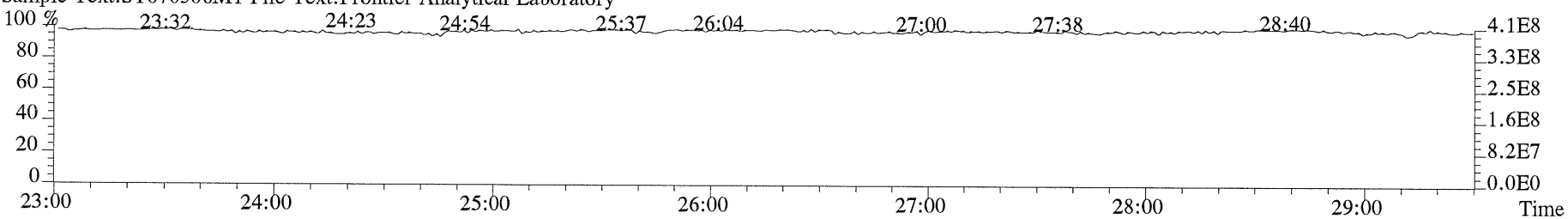
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



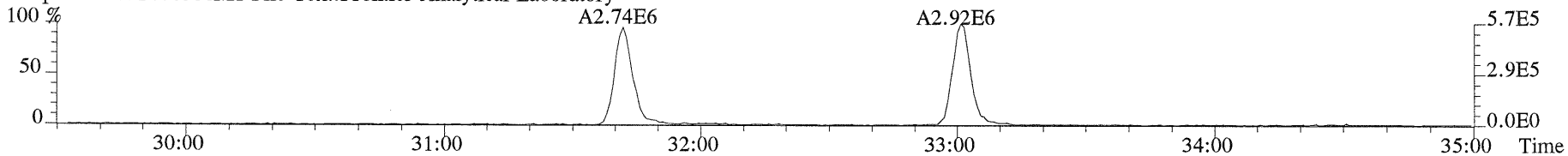
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



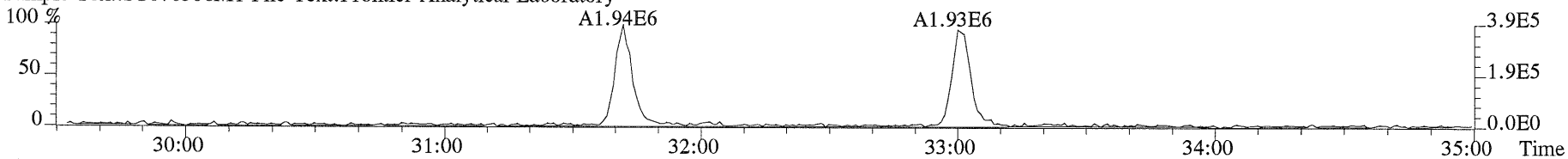
File:05JUL06M #1-390 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:3 Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



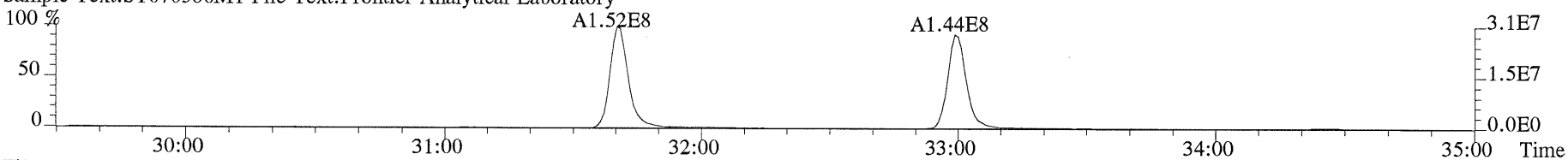
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



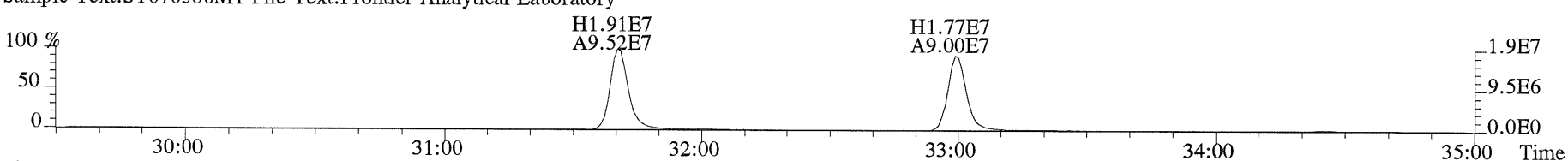
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



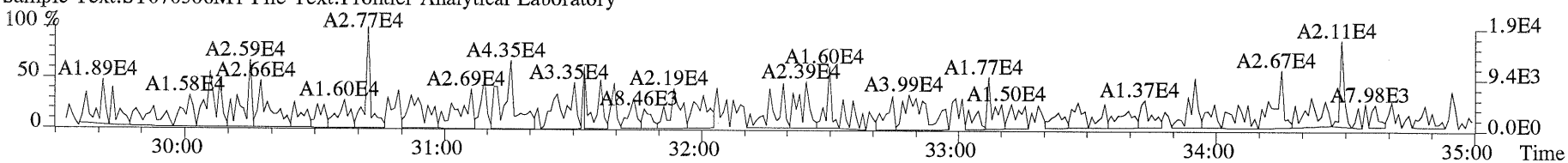
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



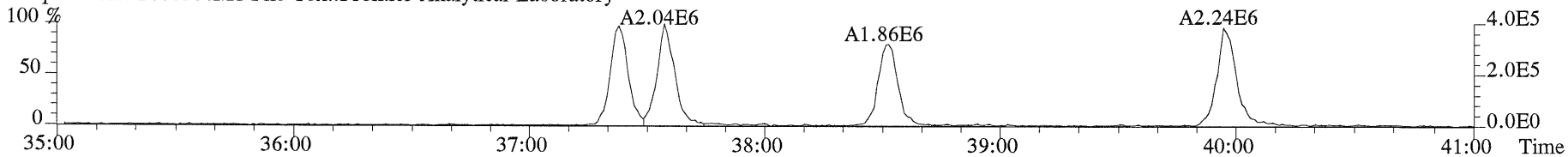
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



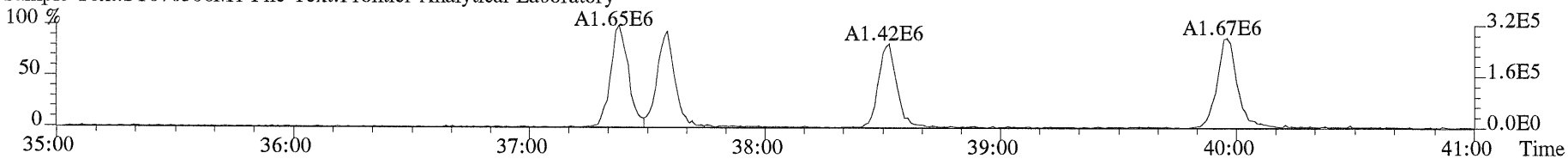
File:05JUL06M #1-424 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:3 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



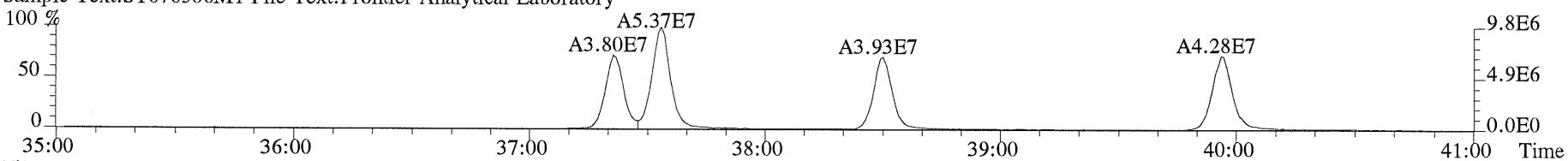
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



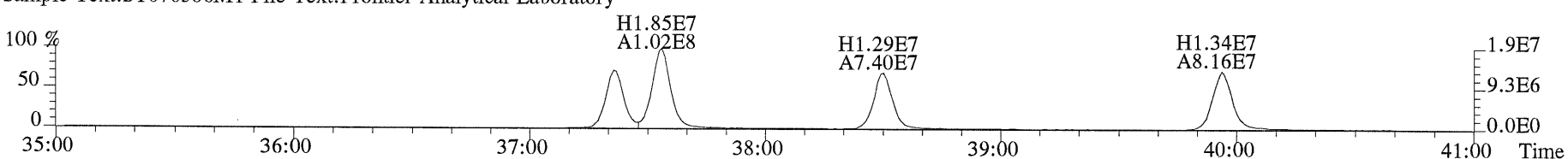
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



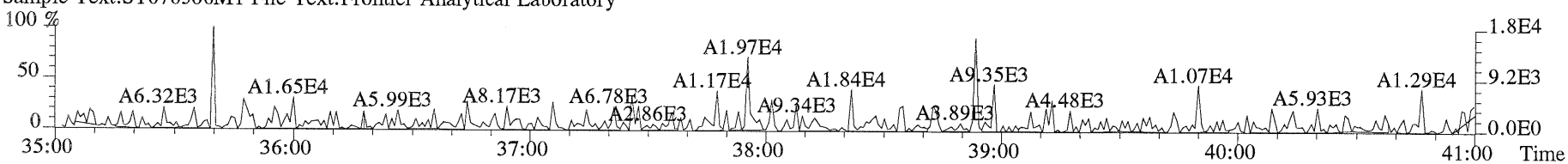
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



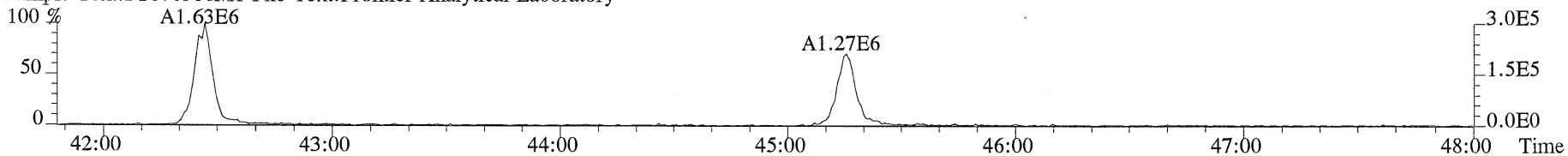
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



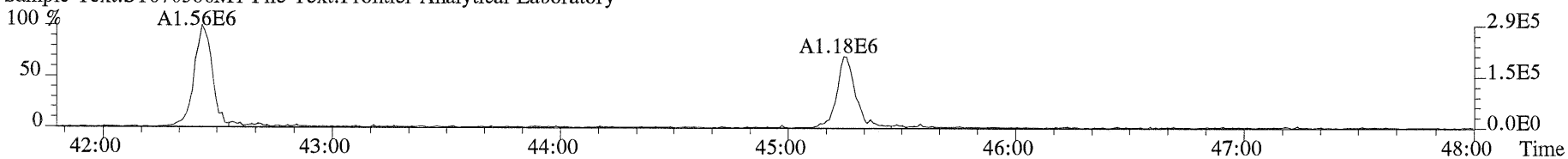
File:05JUL06M #1-464 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:3 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



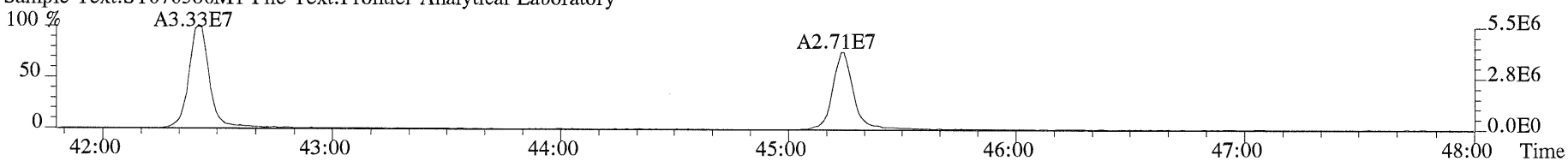
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



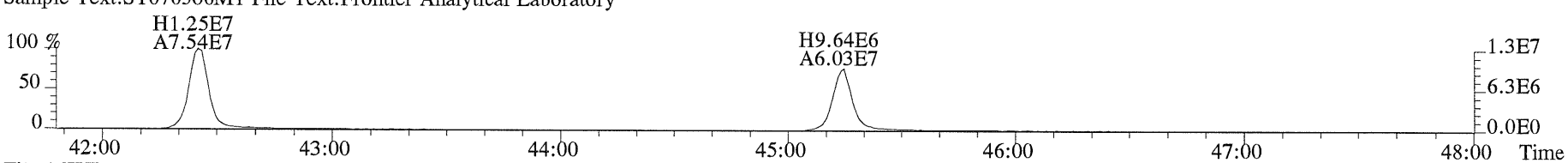
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



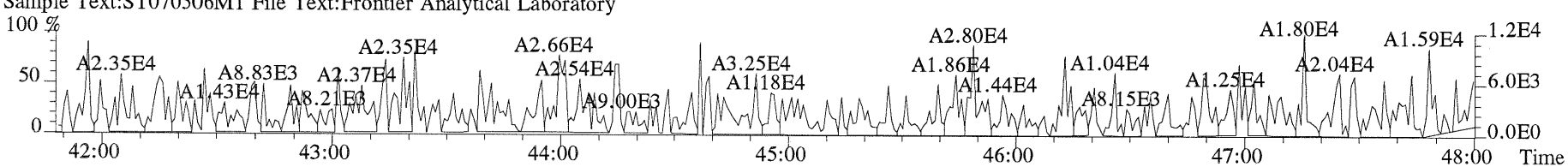
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



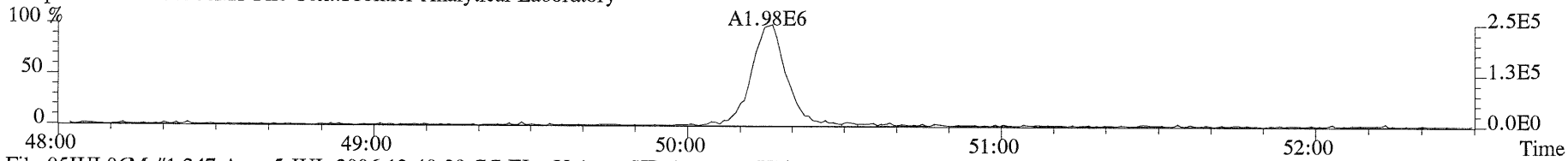
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



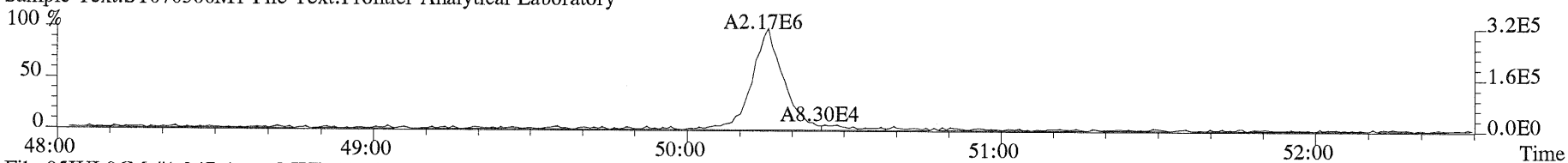
File:05JUL06M #1-541 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:3 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



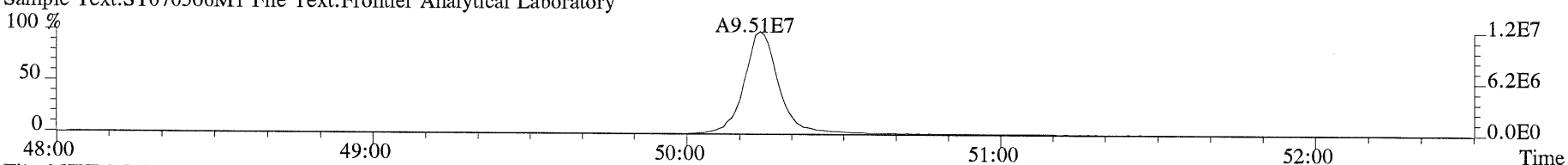
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



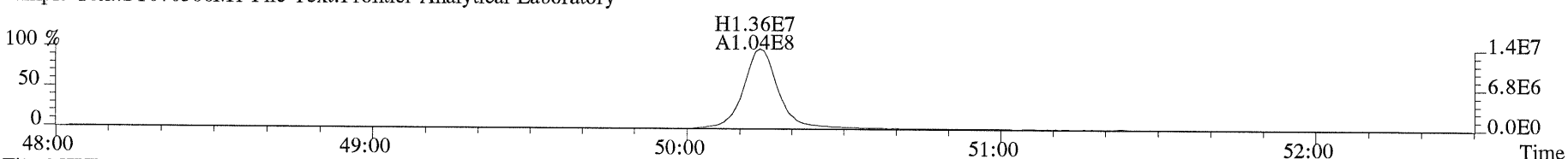
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



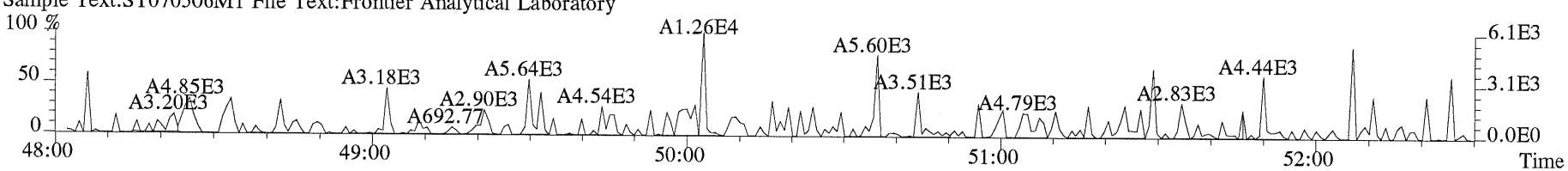
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



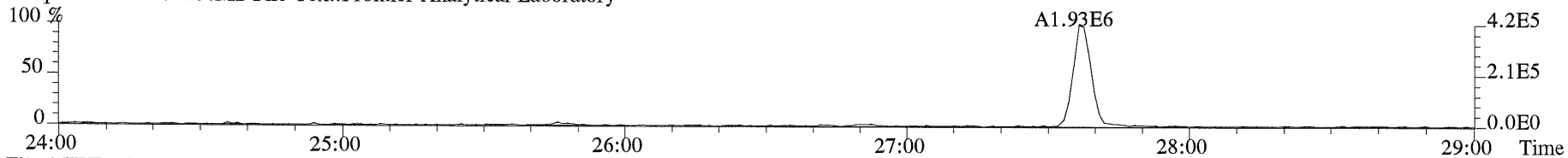
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



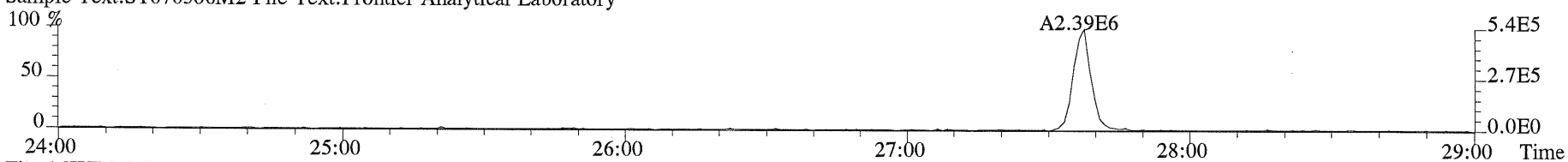
File:05JUL06M #1-347 Acq: 5-JUL-2006 13:40:39 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:3 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M1 File Text:Frontier Analytical Laboratory



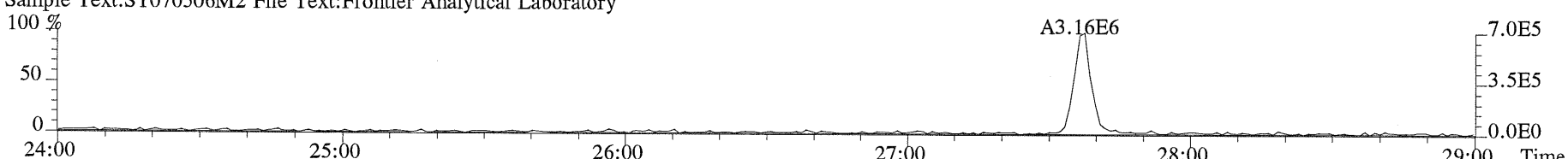
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



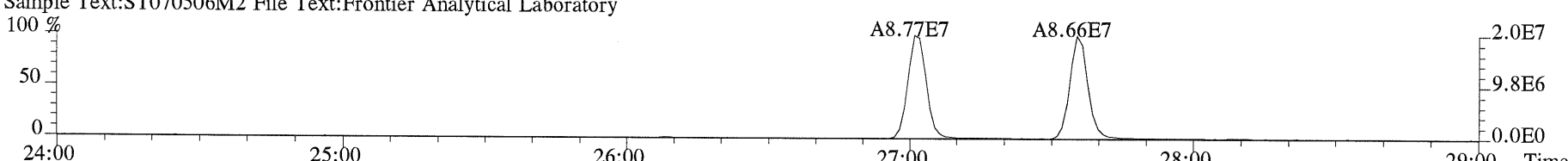
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



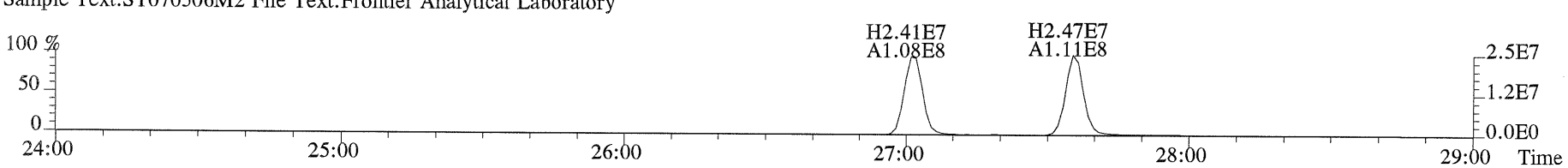
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



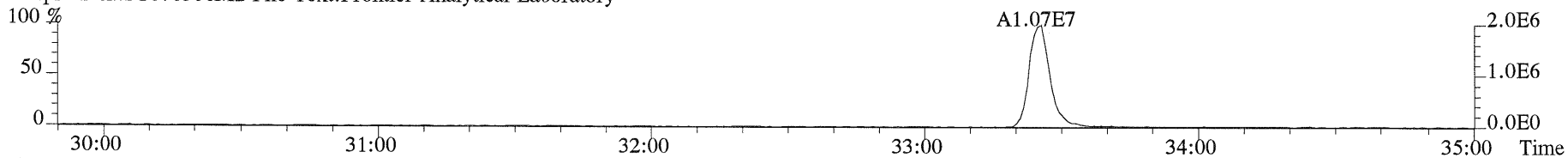
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



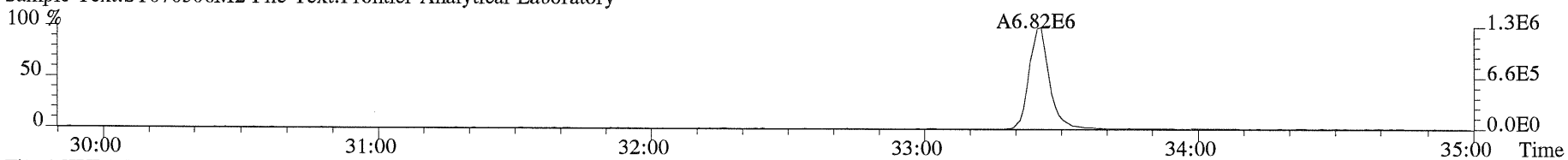
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



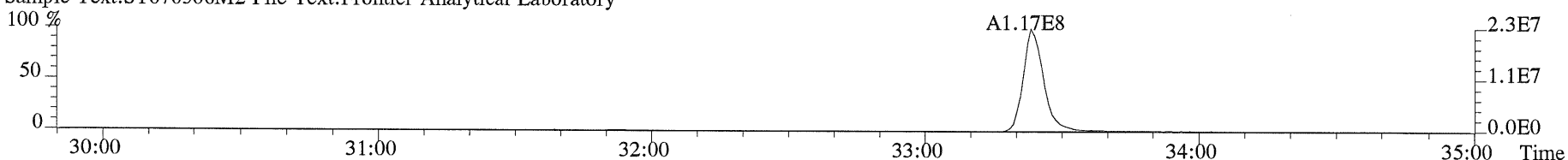
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



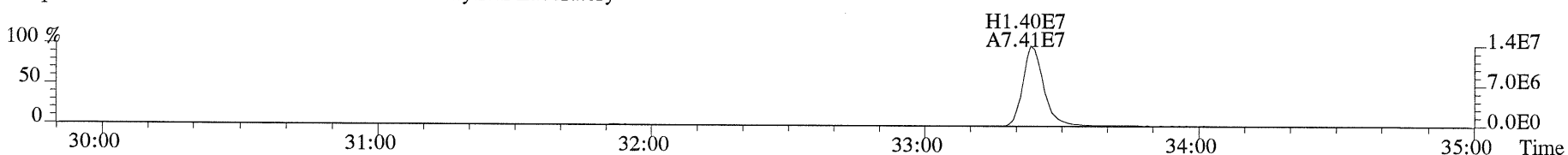
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



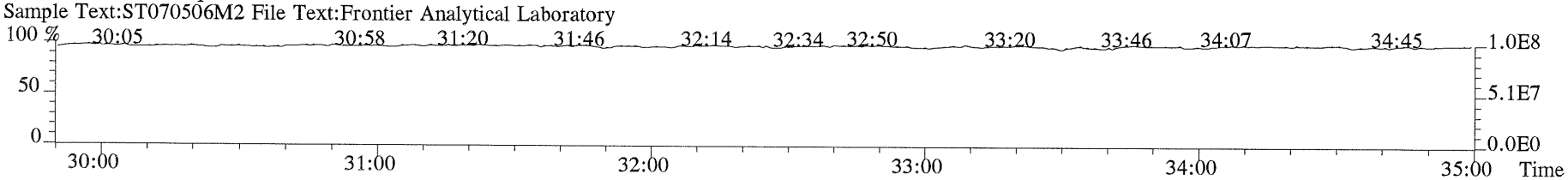
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



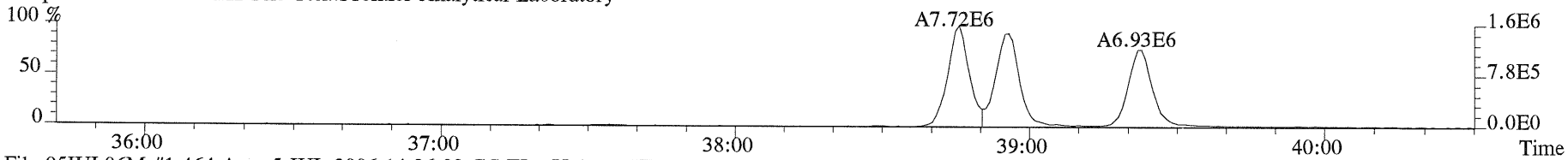
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



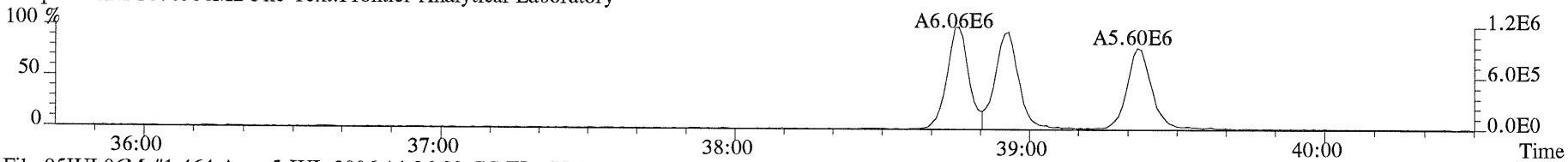
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:4 F:2 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



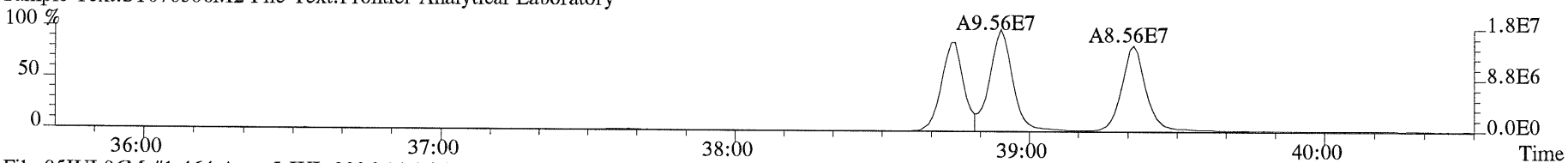
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



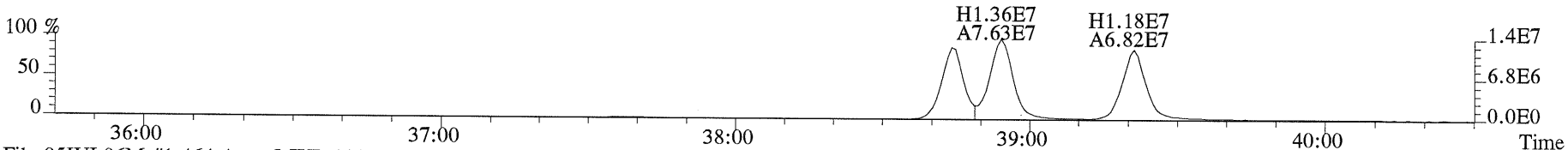
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



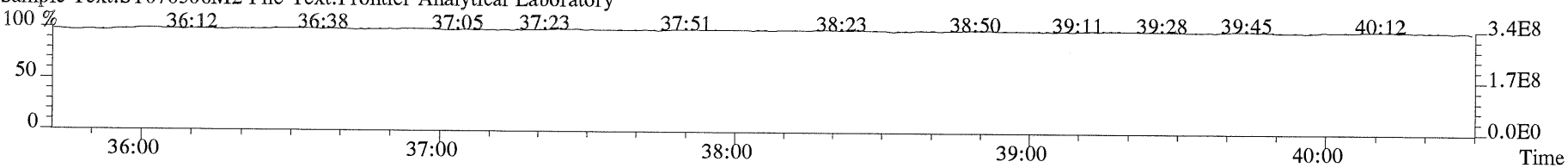
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



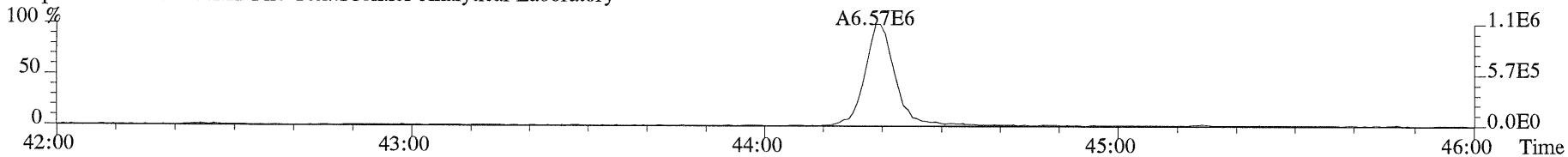
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



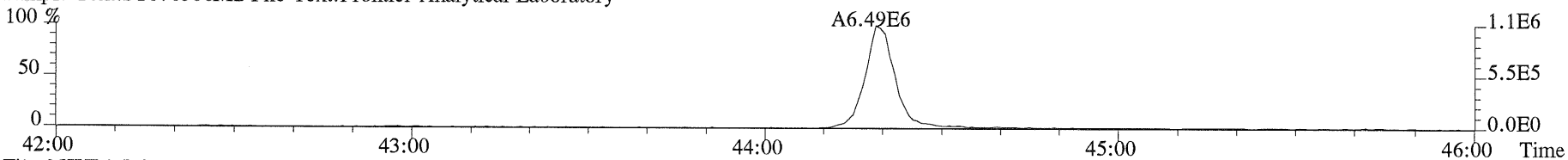
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:4 F:3 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



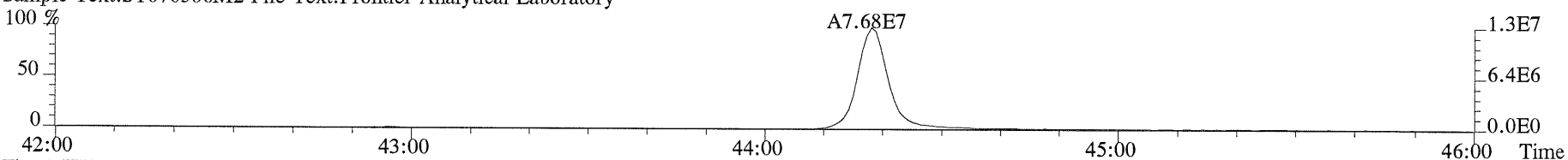
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



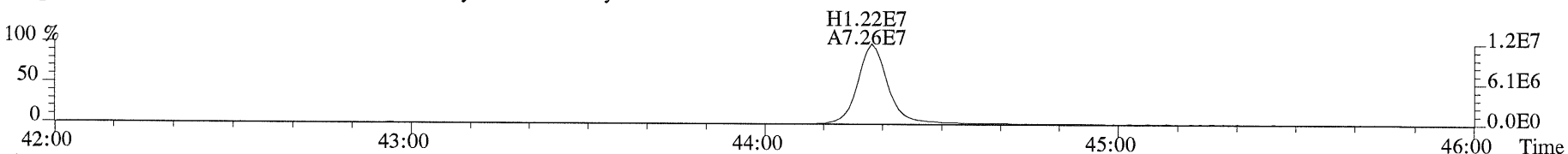
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



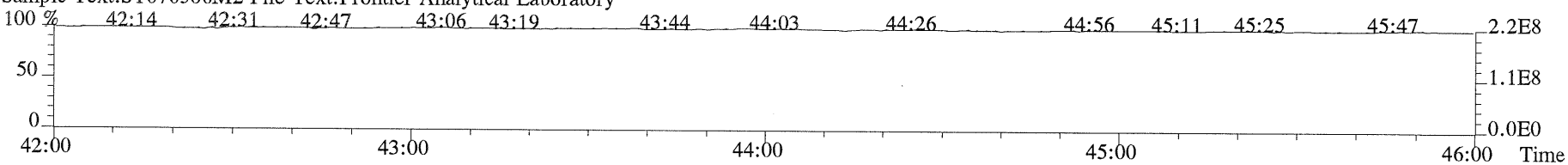
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



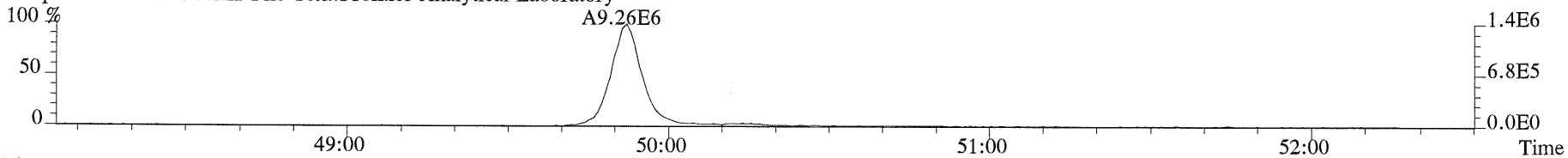
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



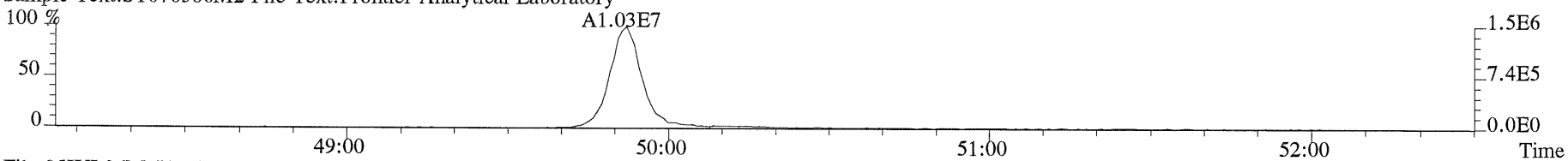
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:4 F:4 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

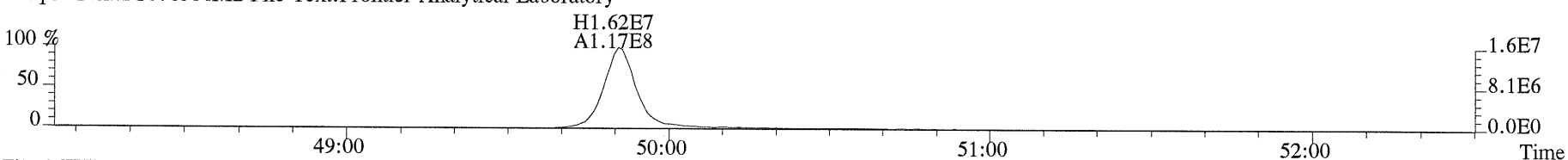


File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

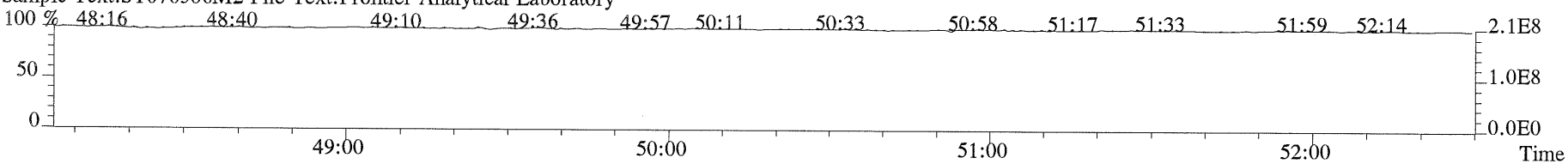


File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory

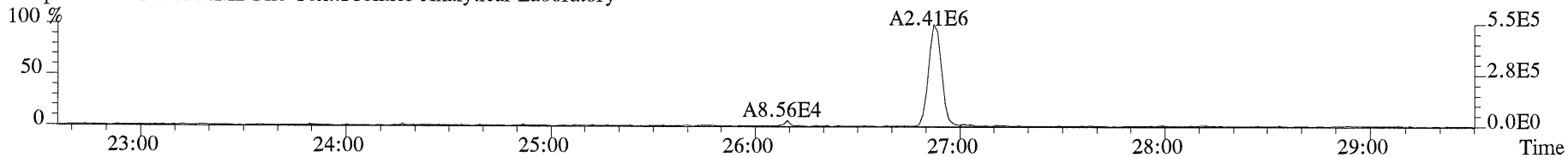
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



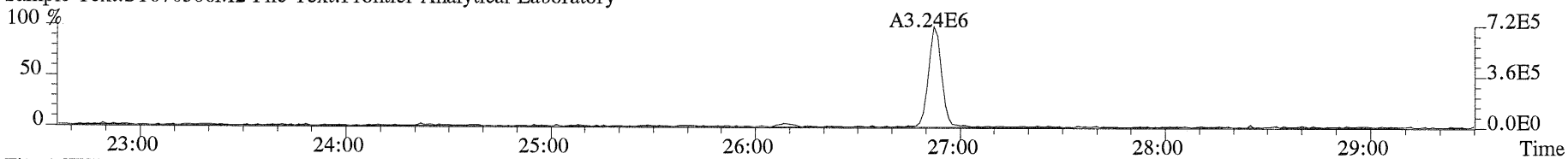
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:4 F:5 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



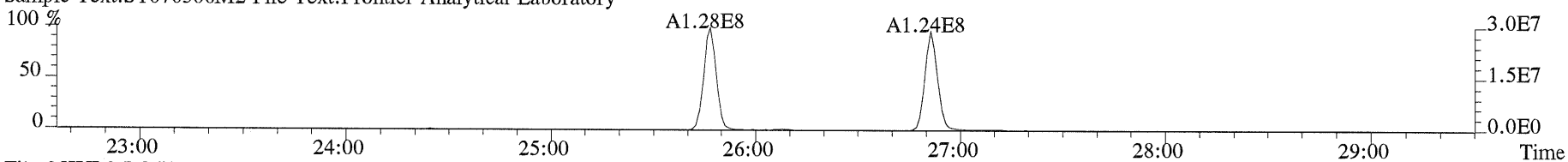
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



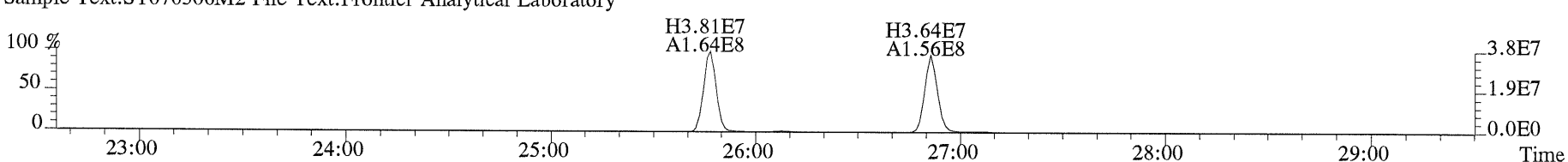
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



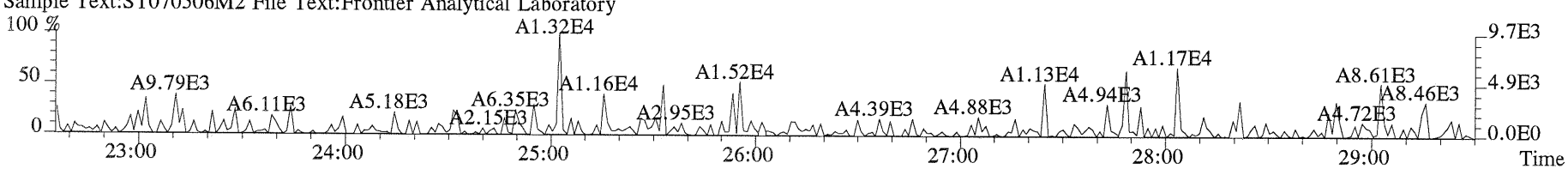
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



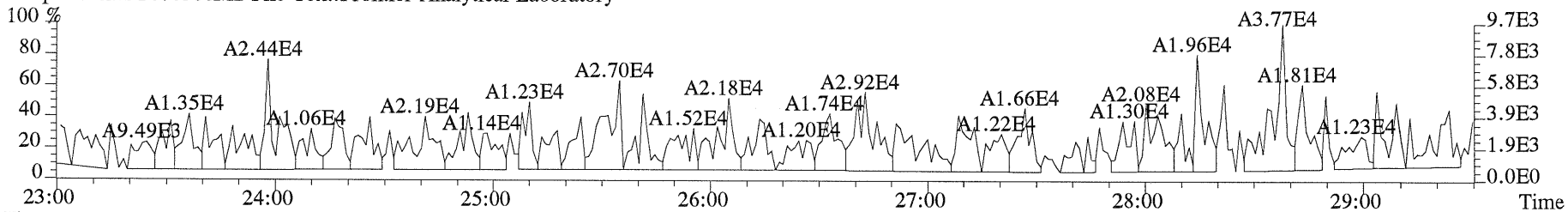
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



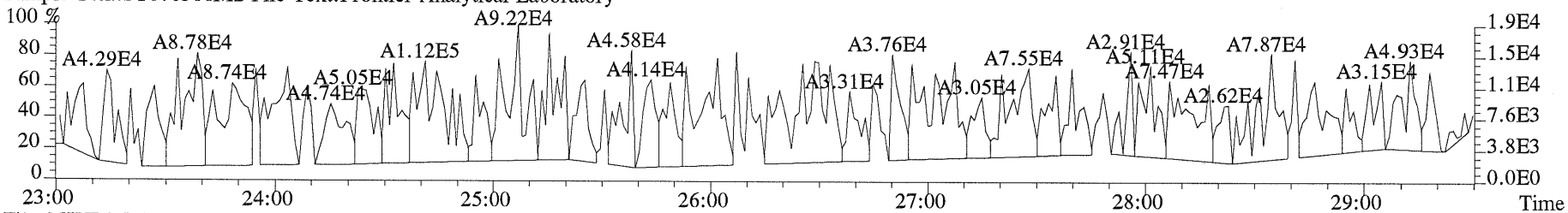
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



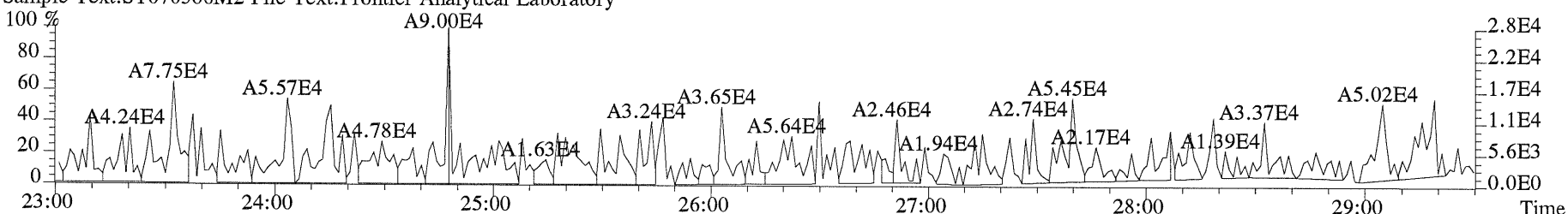
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



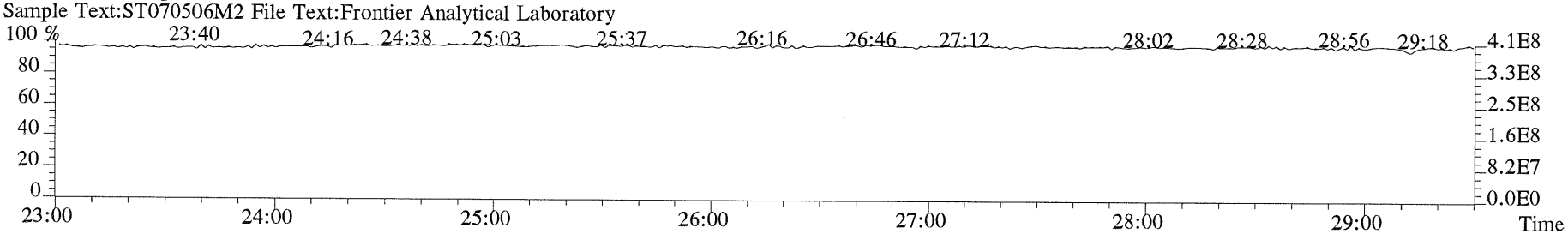
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



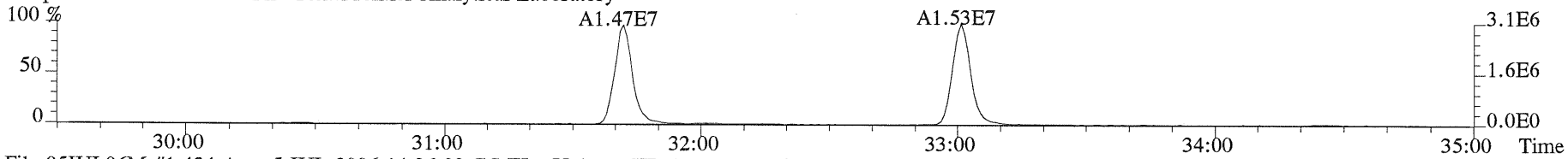
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



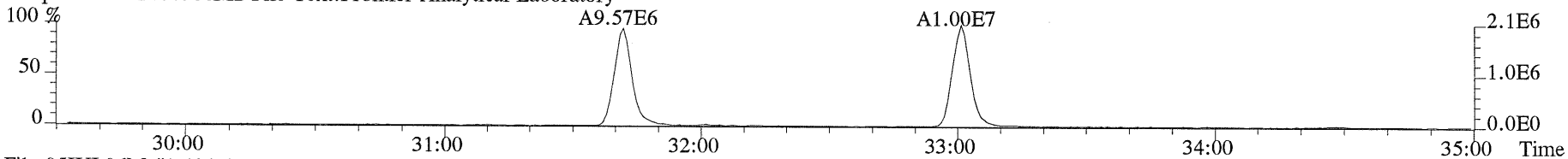
File:05JUL06M #1-390 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:4 Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



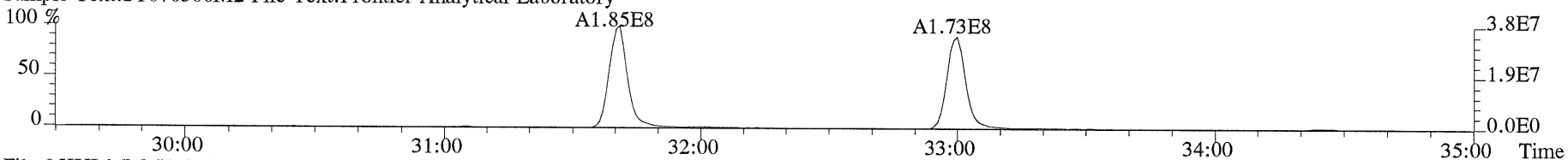
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



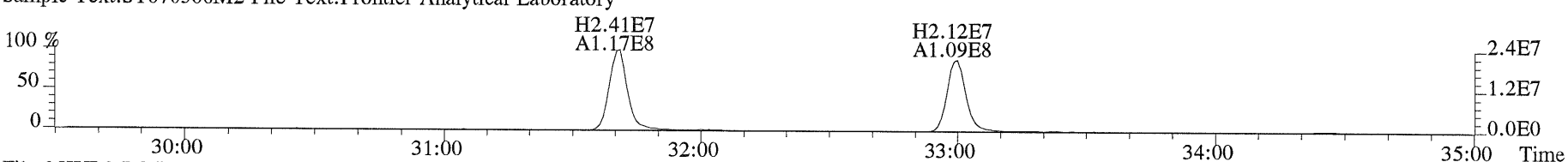
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



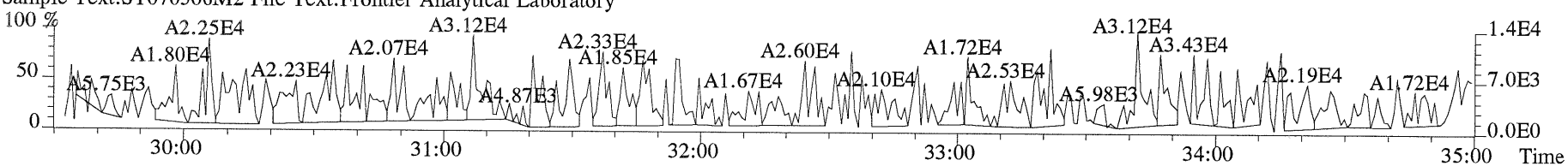
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



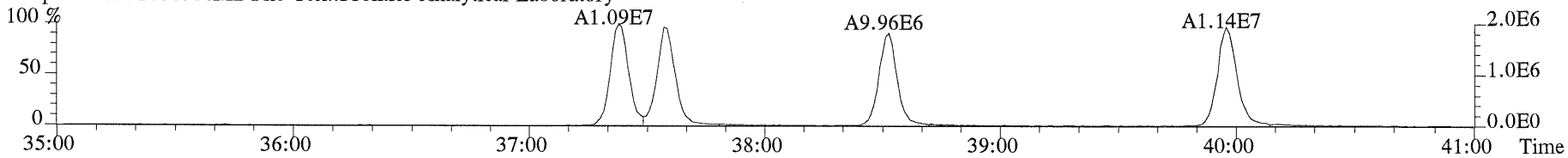
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



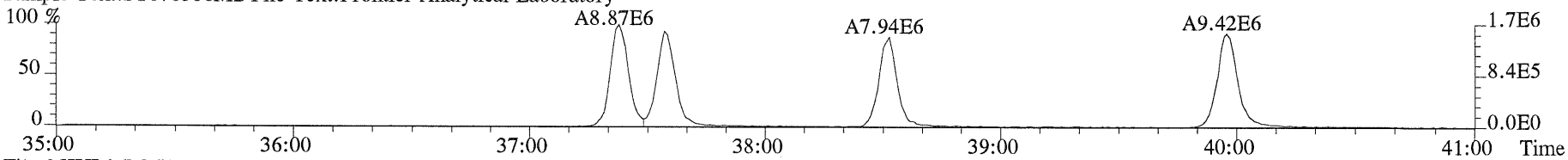
File:05JUL06M #1-424 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:4 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



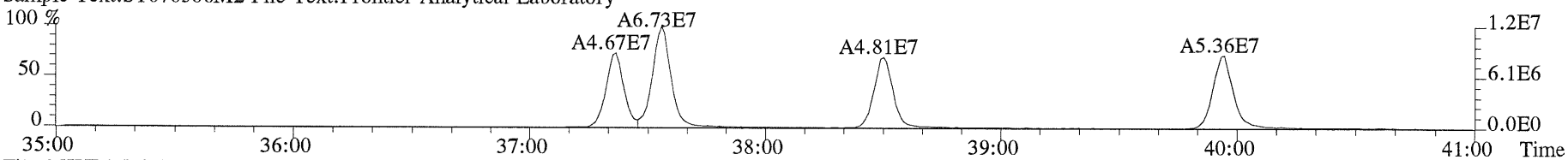
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



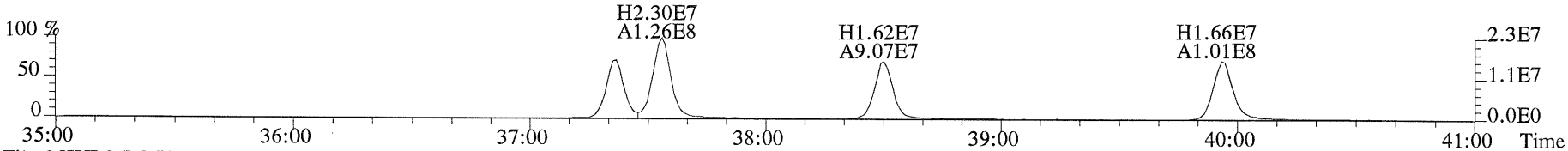
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



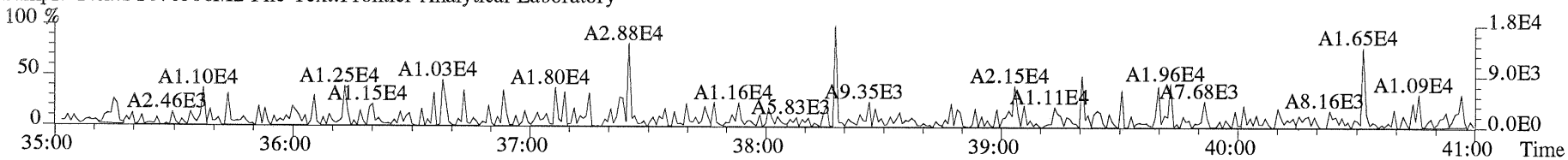
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



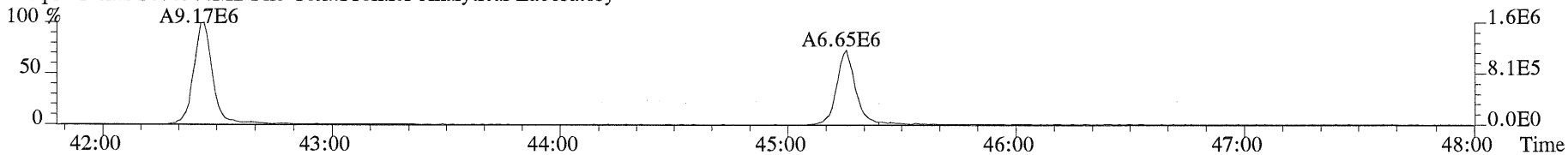
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



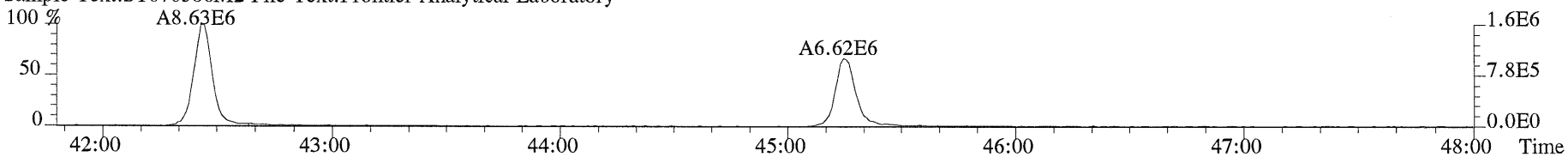
File:05JUL06M #1-464 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:4 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



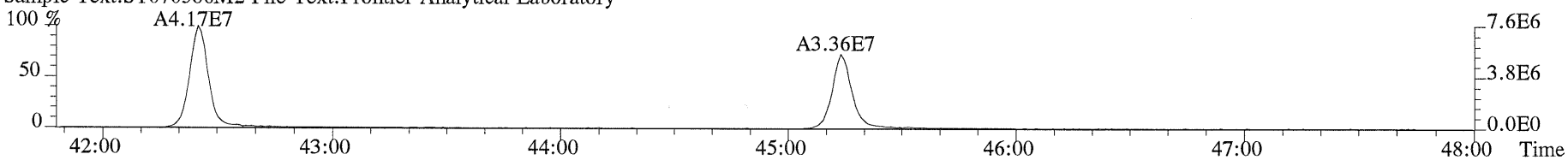
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



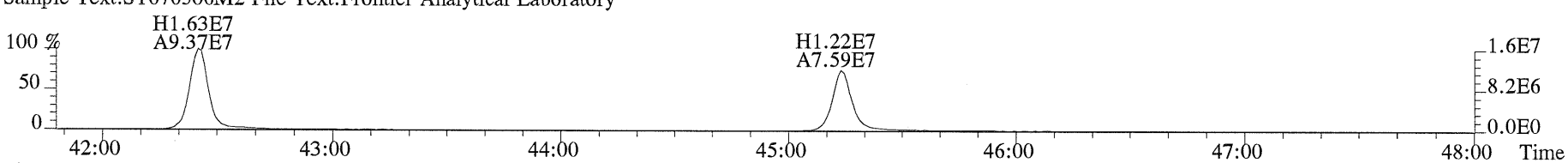
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



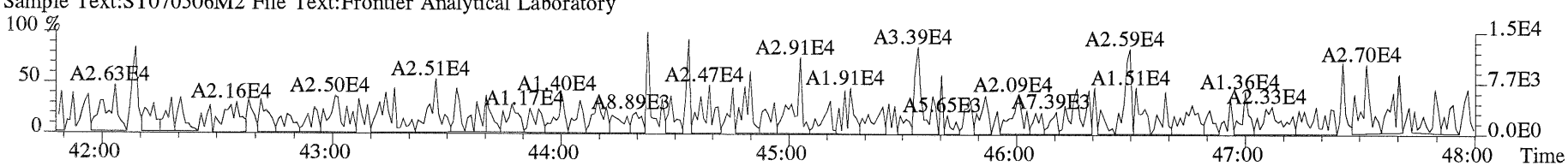
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



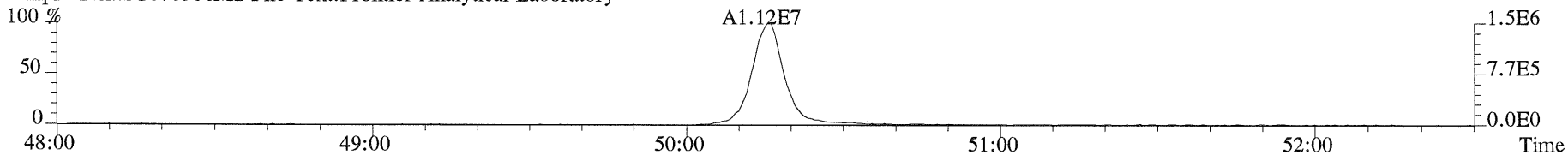
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



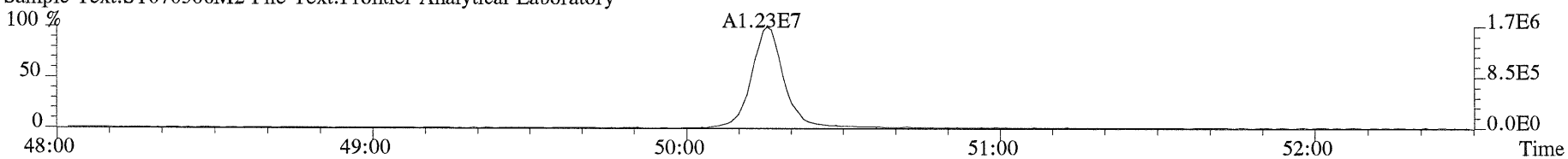
File:05JUL06M #1-541 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:4 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



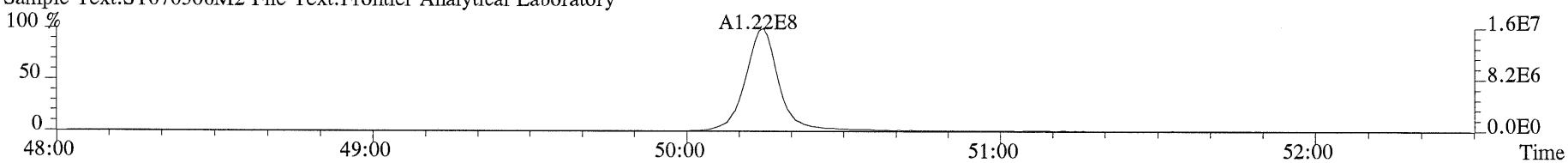
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



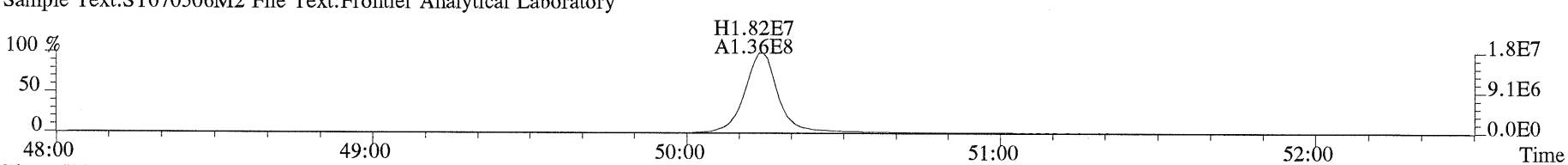
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



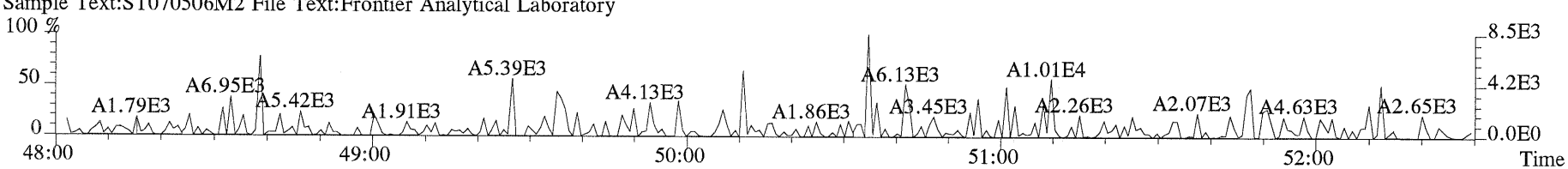
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



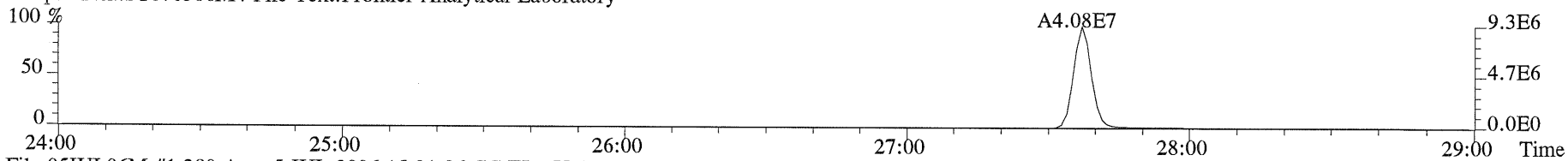
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



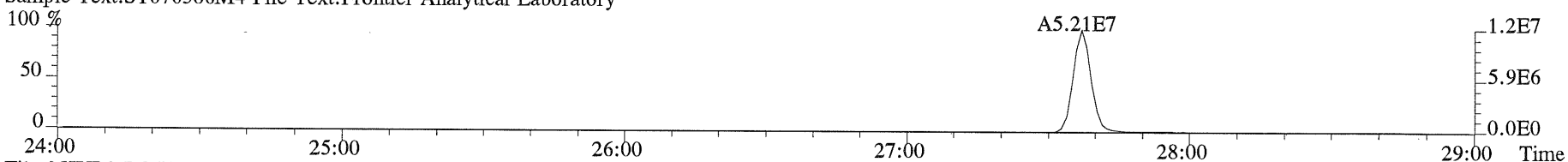
File:05JUL06M #1-347 Acq: 5-JUL-2006 14:36:03 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:4 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M2 File Text:Frontier Analytical Laboratory



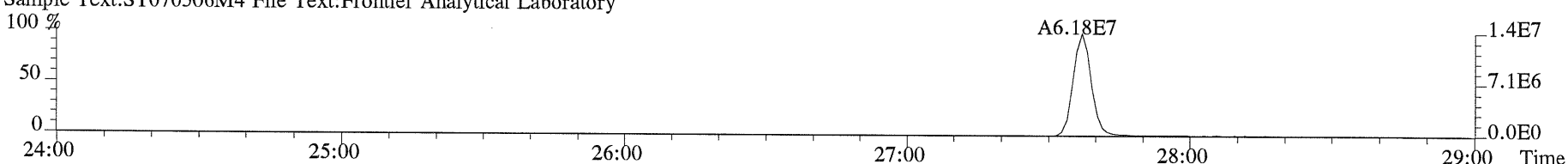
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



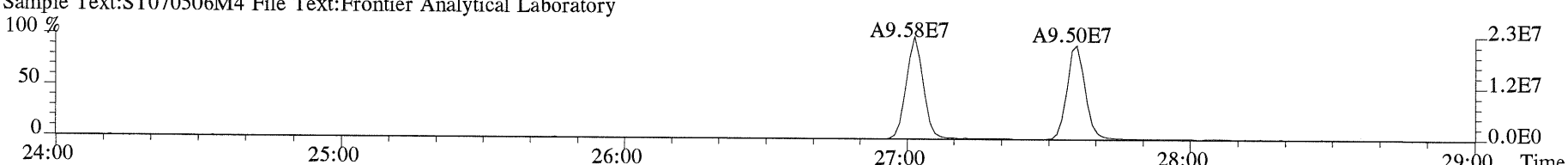
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



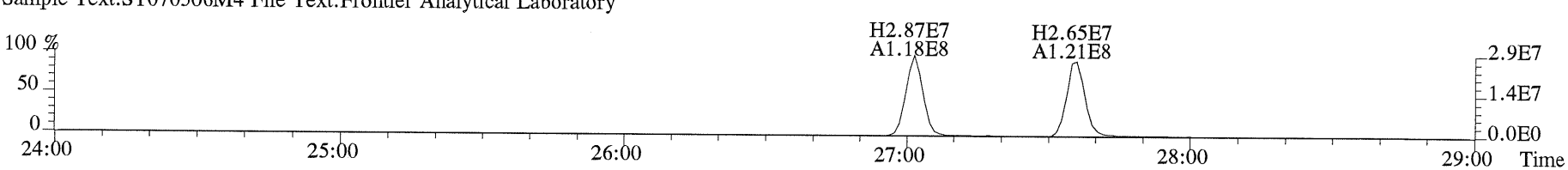
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



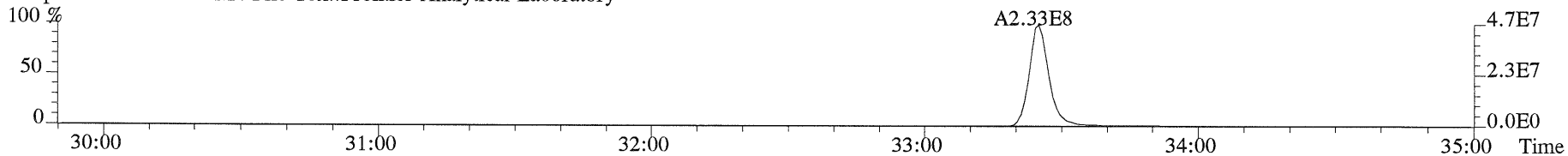
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



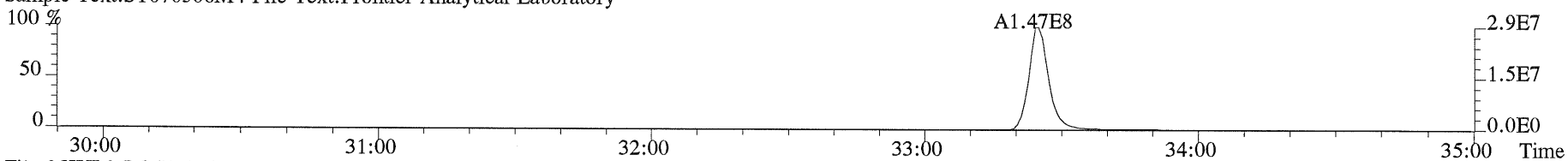
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



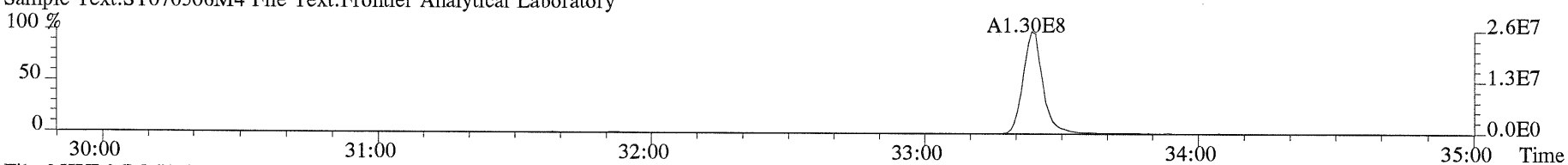
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



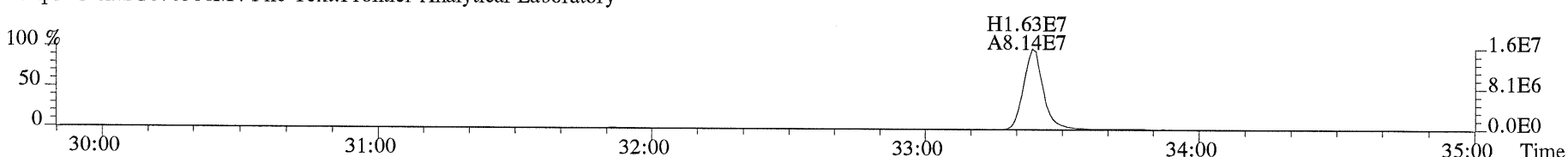
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



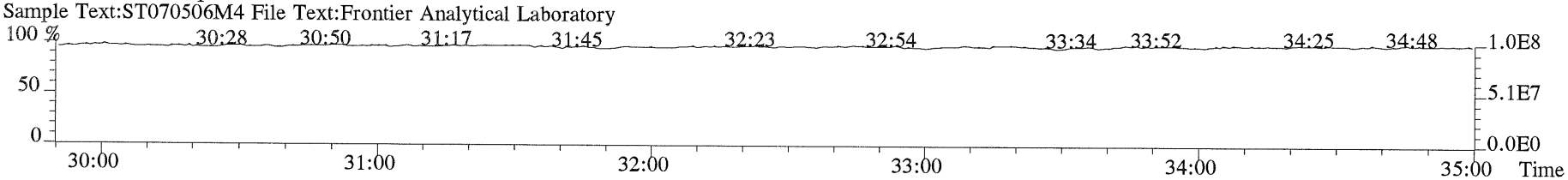
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



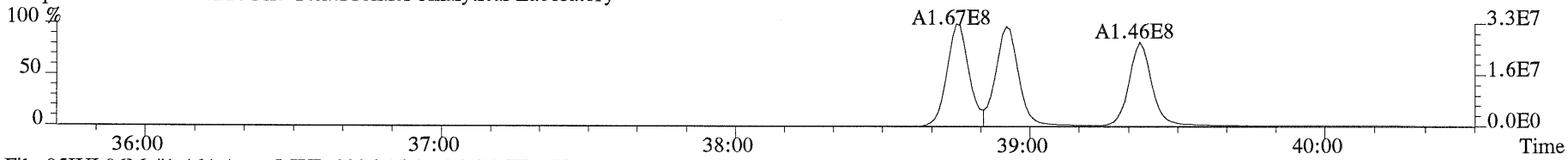
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



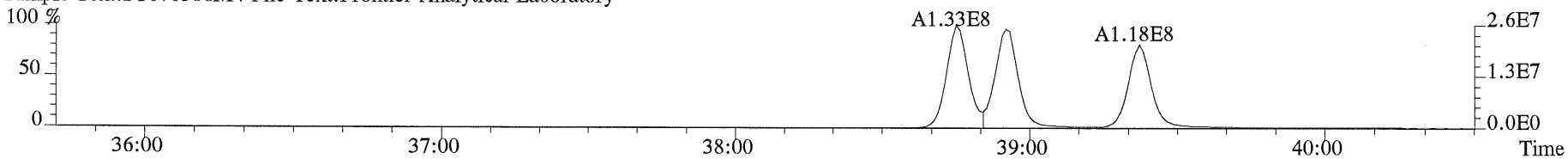
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:5 F:2 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



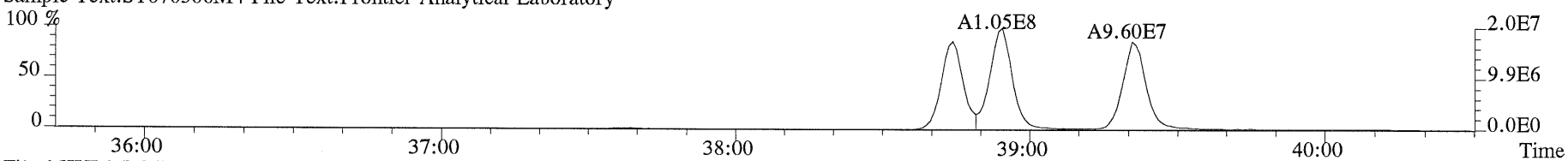
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



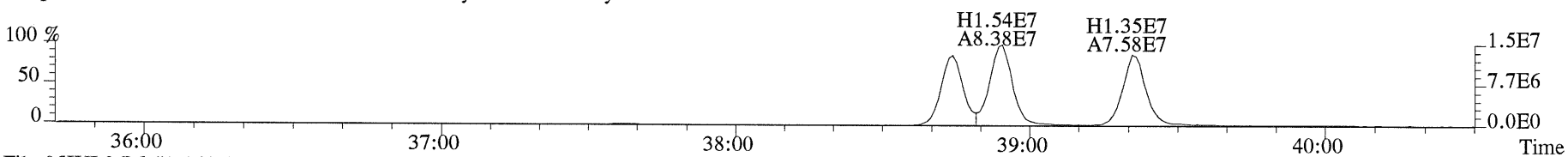
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



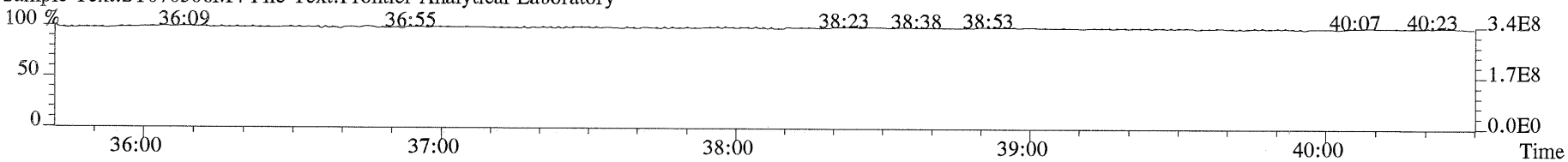
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



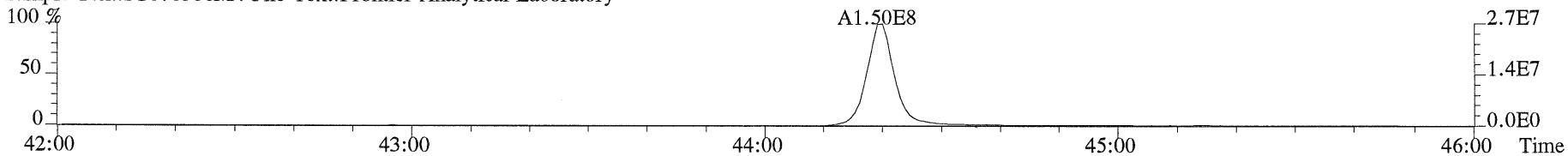
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



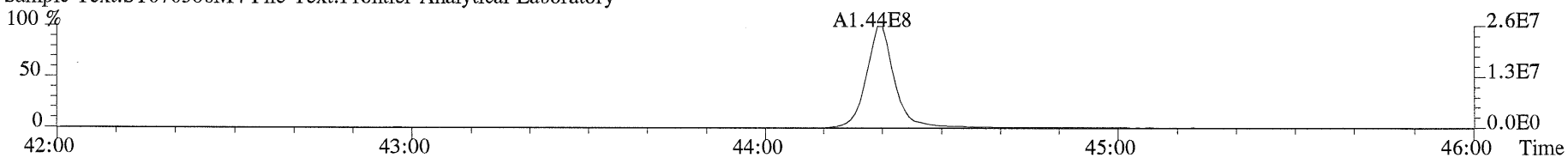
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:5 F:3 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



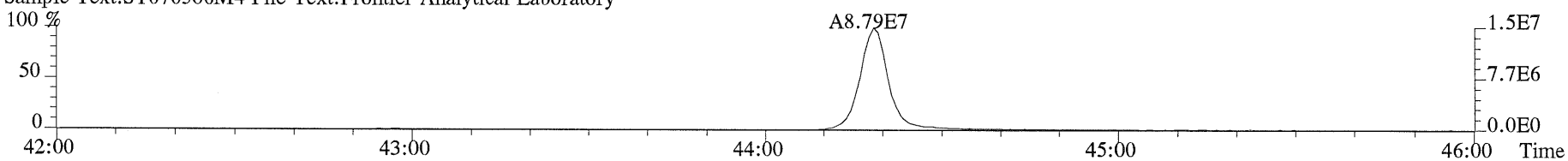
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



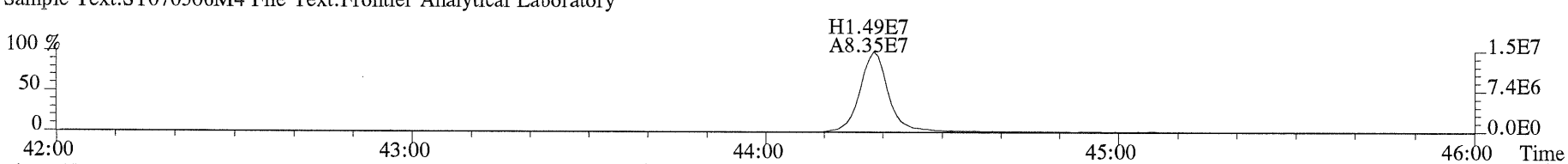
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



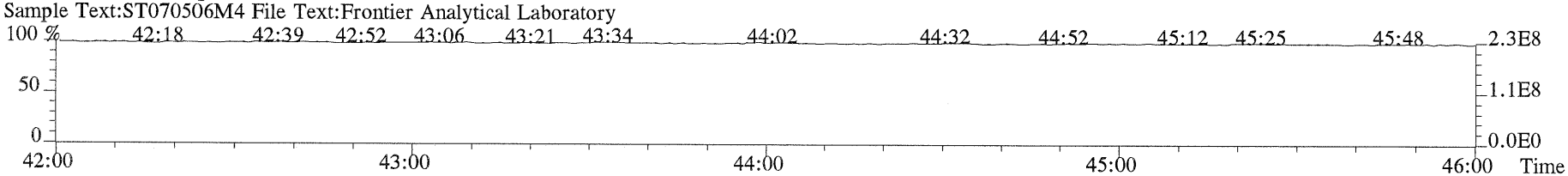
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory

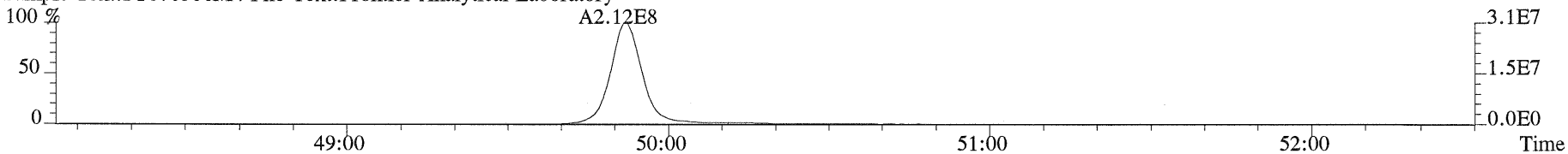


File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:5 F:4 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory

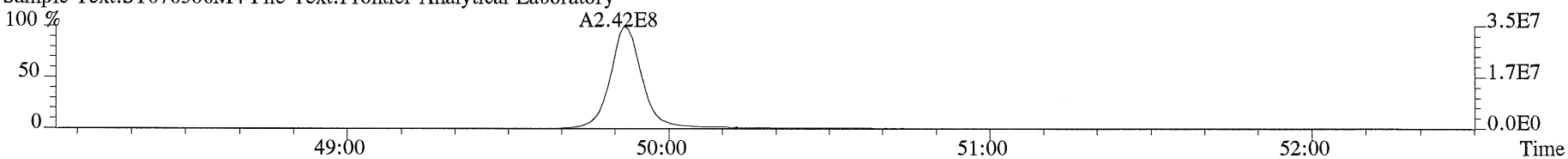


558

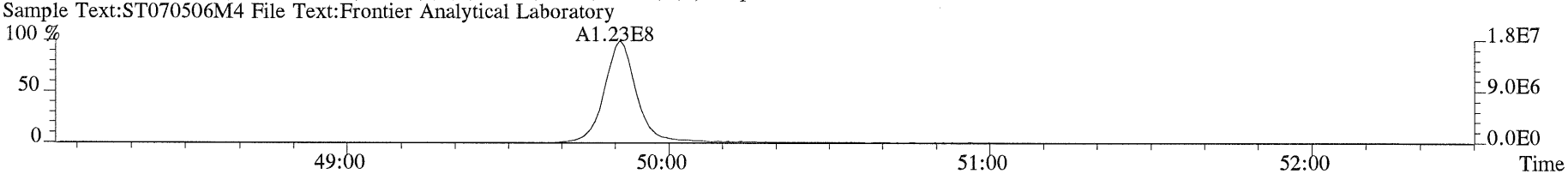
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



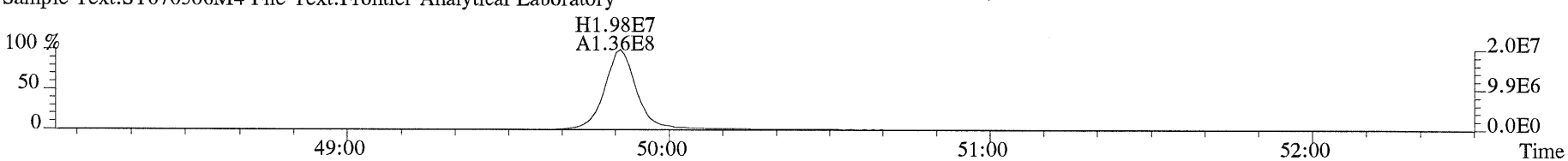
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



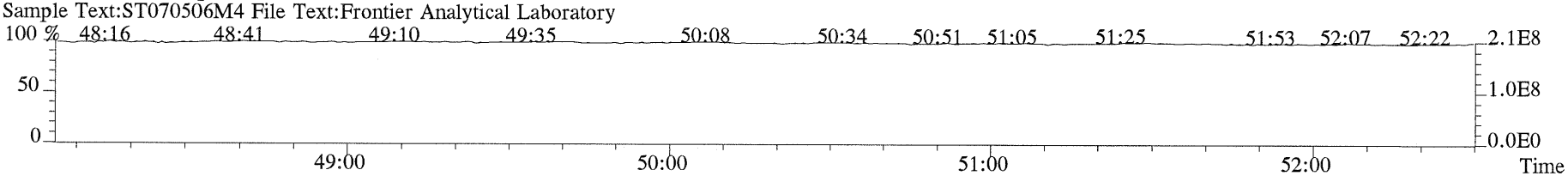
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory

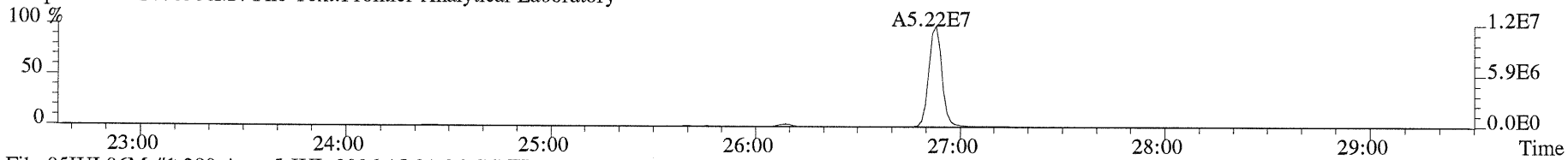


File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:5 F:5 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory

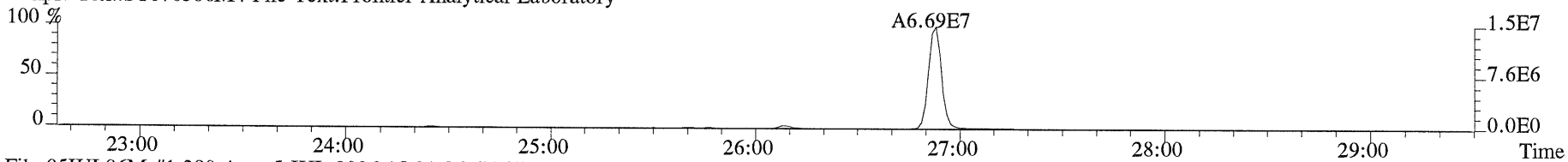


Klamath River Sediment Study

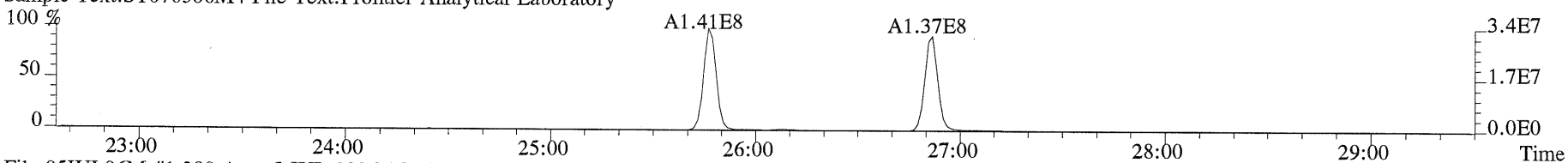
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



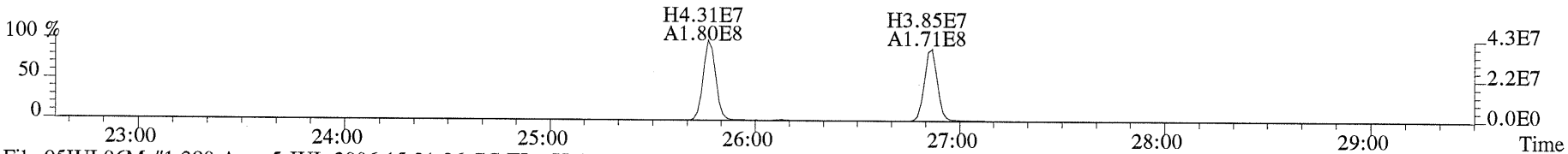
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



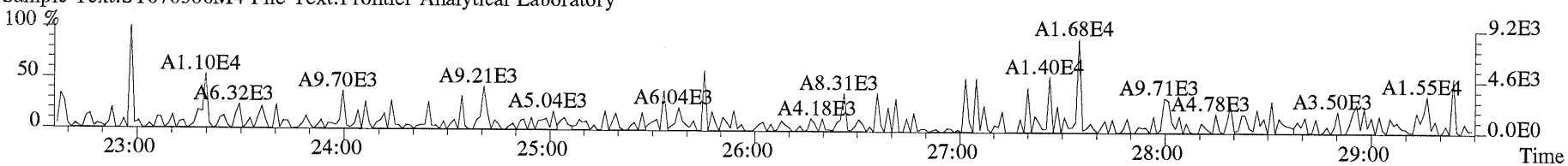
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



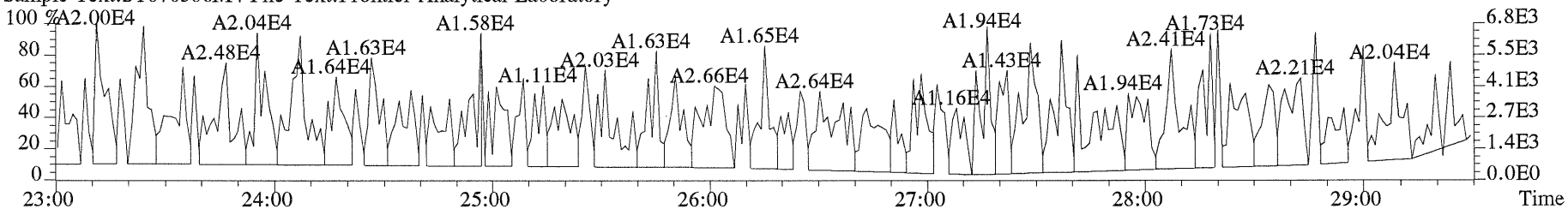
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



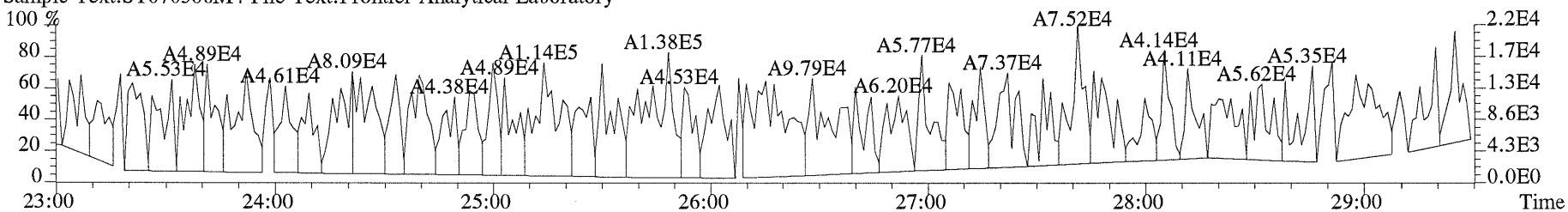
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



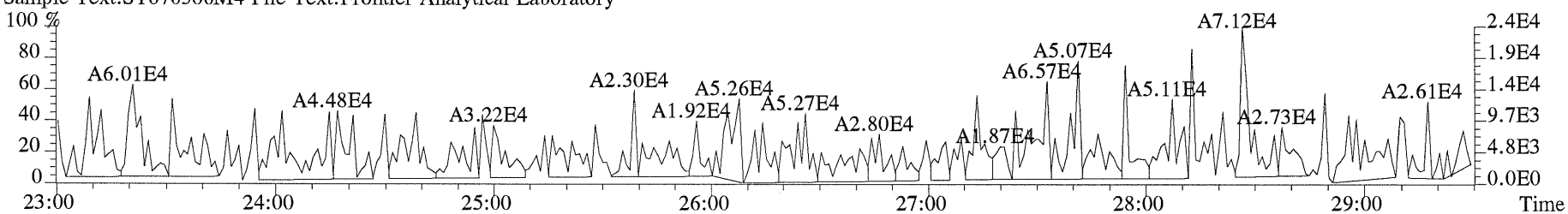
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



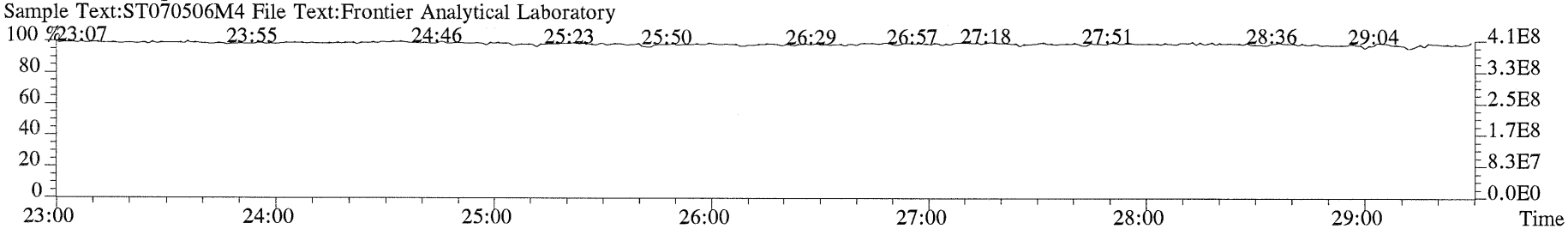
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



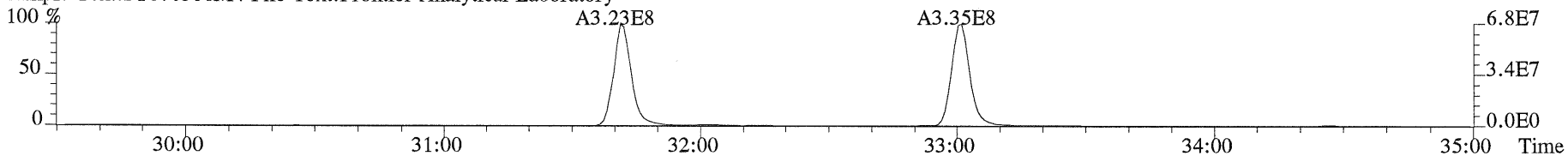
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



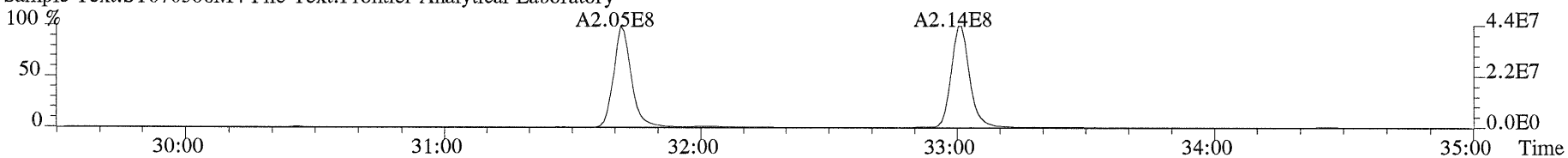
File:05JUL06M #1-390 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:5 Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



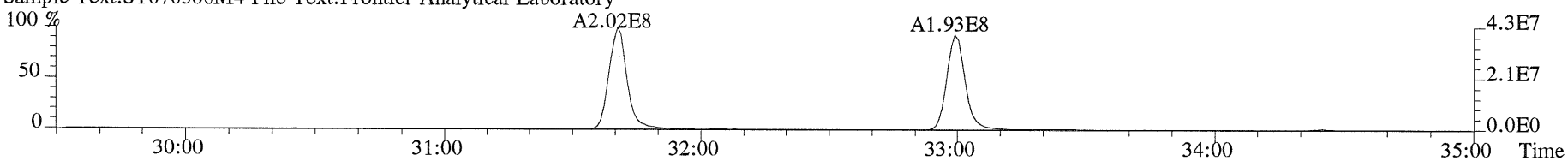
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



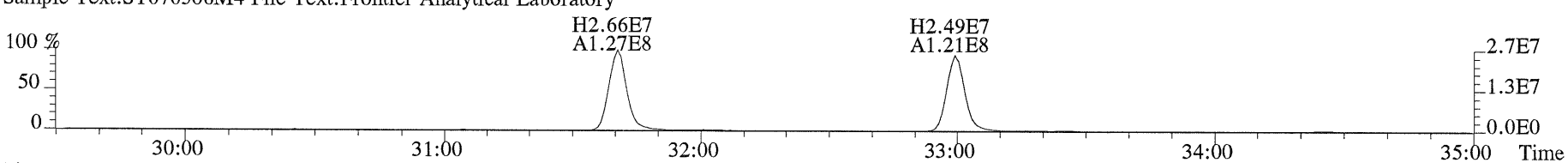
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



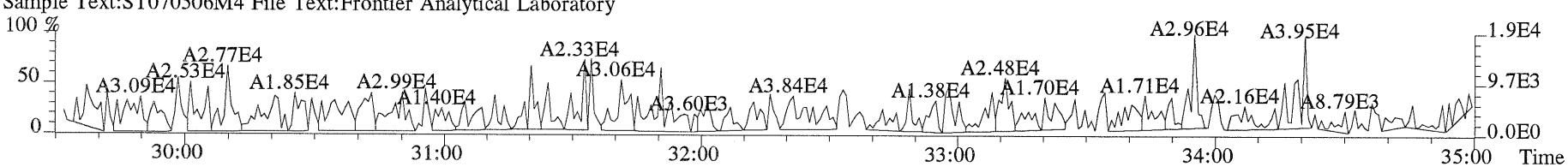
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



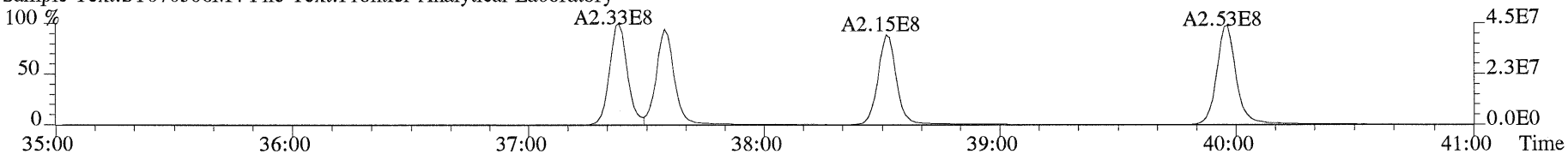
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



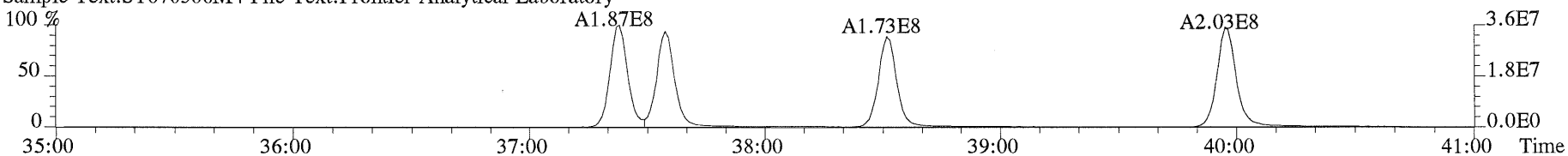
File:05JUL06M #1-425 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:5 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



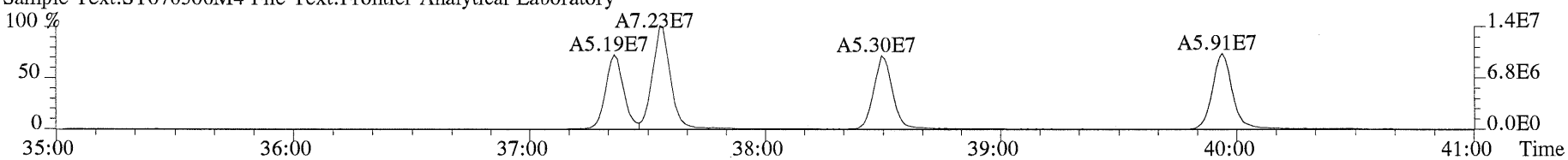
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



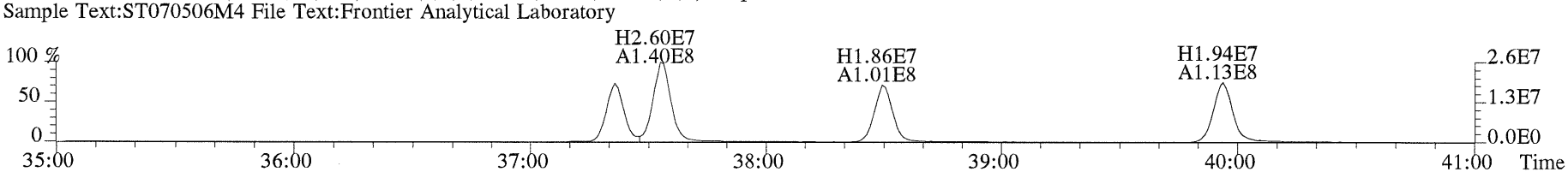
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



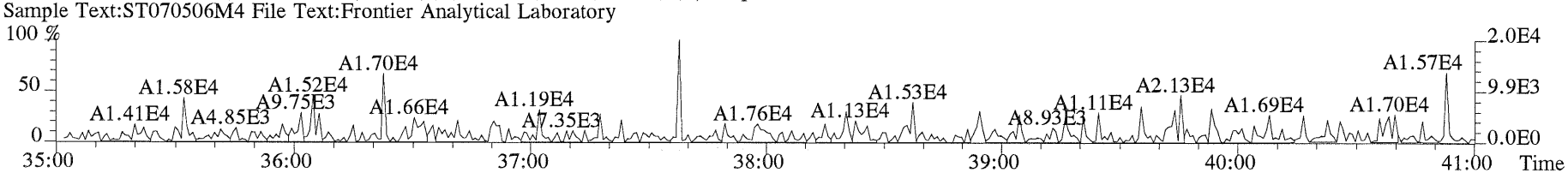
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



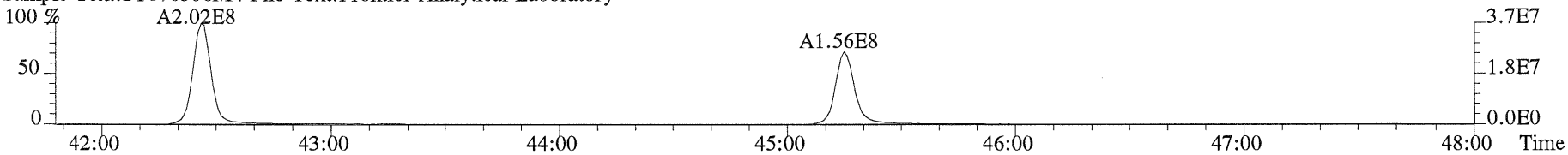
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



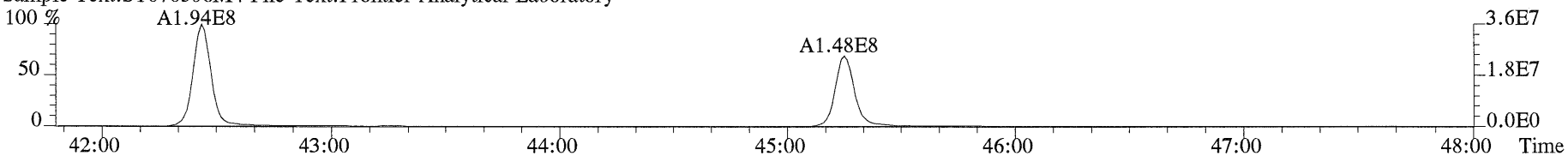
File:05JUL06M #1-464 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:5 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



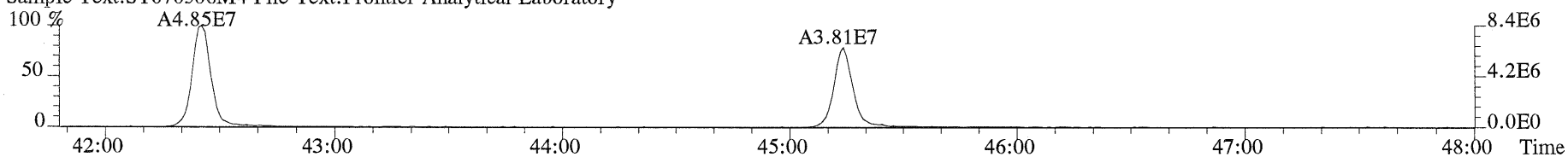
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



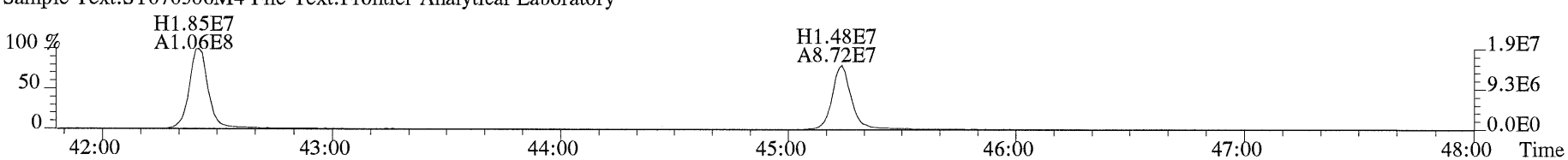
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



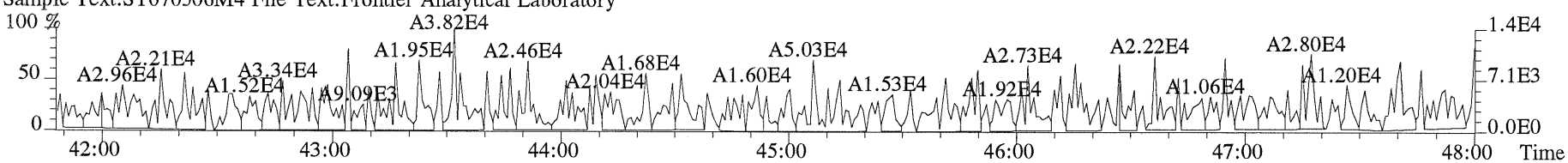
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



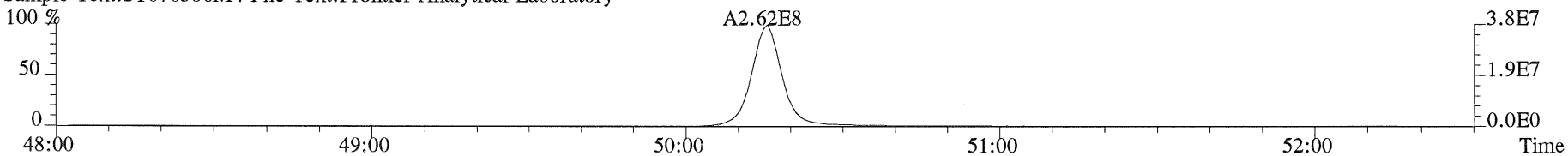
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



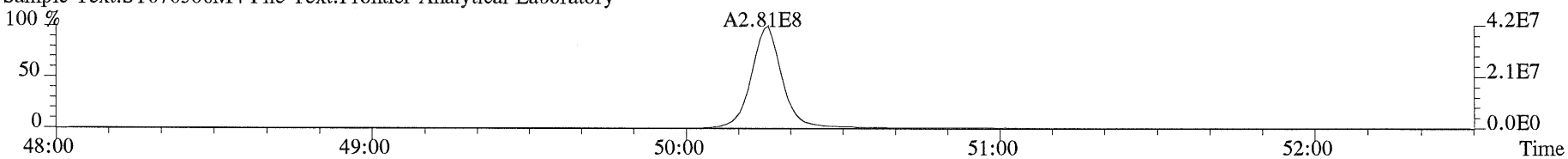
File:05JUL06M #1-541 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:5 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



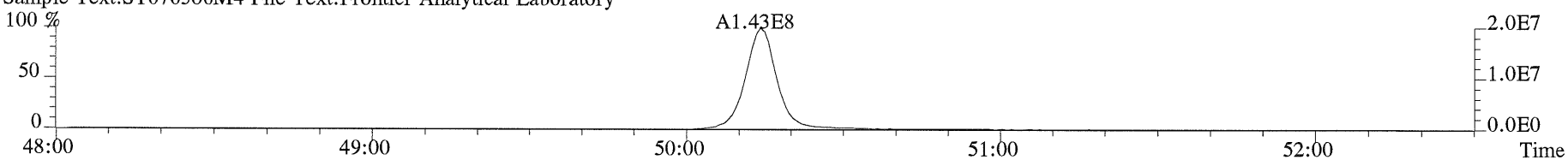
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



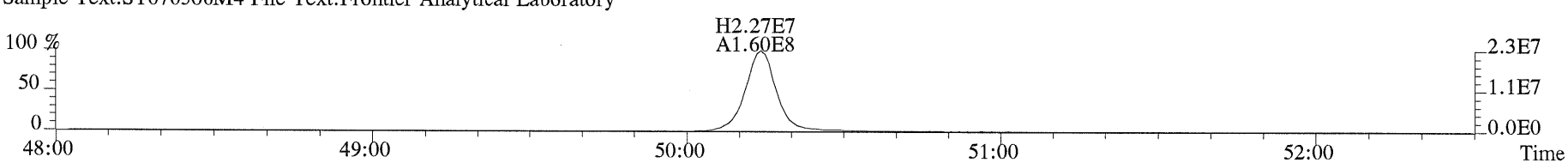
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



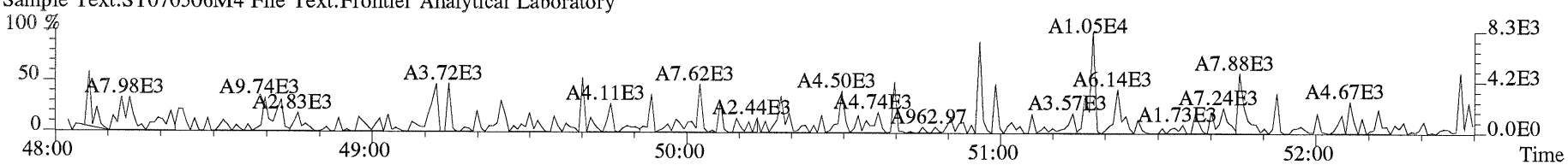
File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 15:31:26 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:5 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M4 File Text:Frontier Analytical Laboratory



Klamath River Sediment Study

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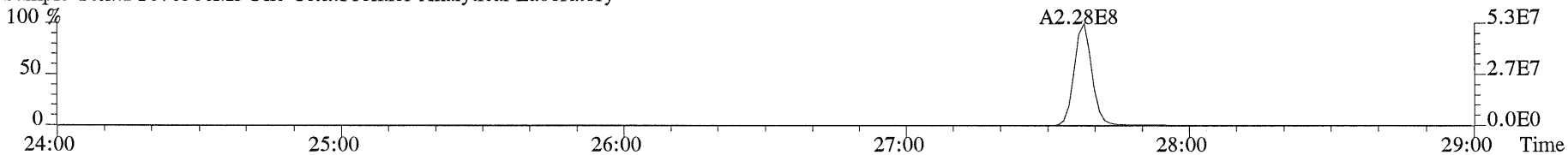
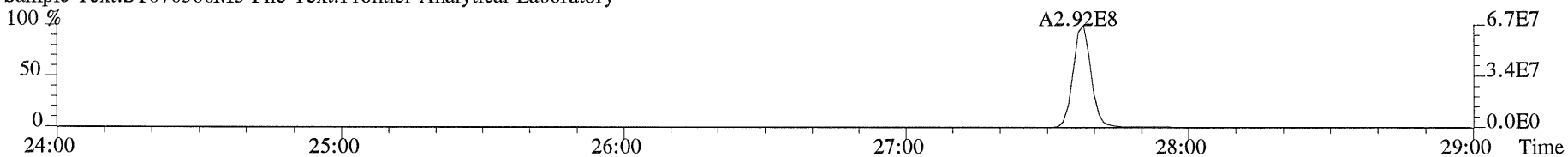
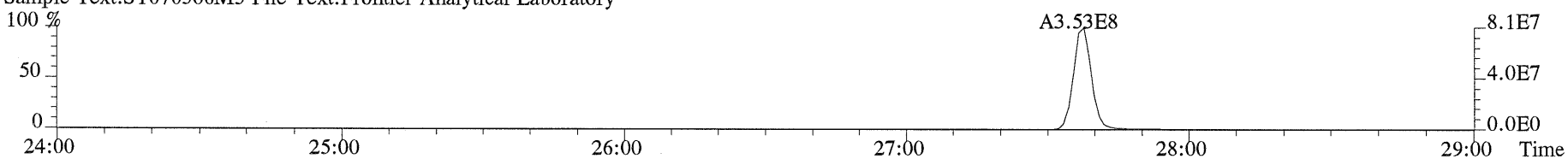
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



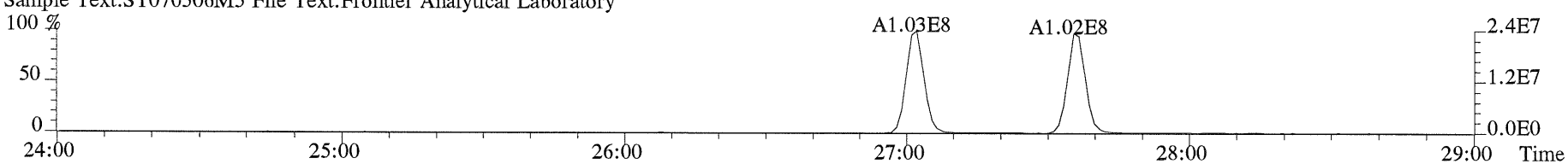
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



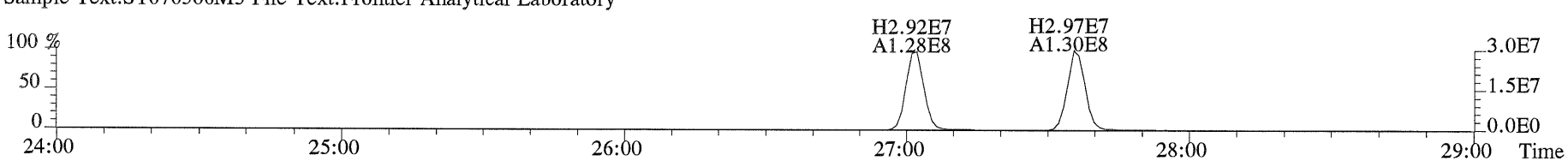
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



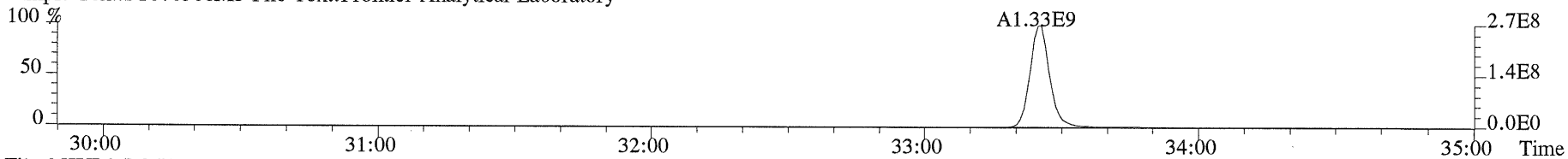
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



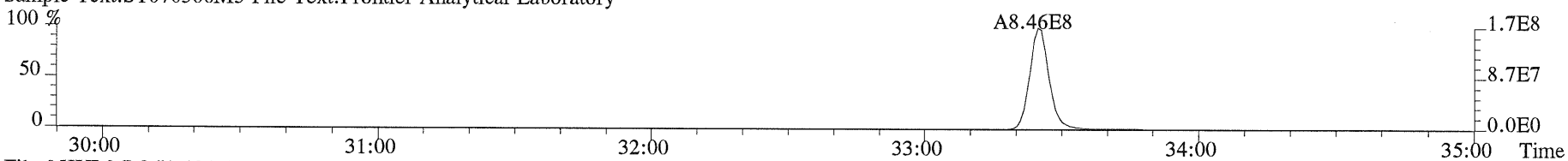
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



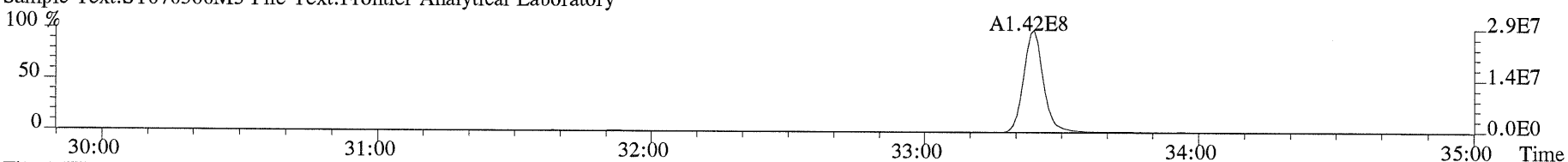
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



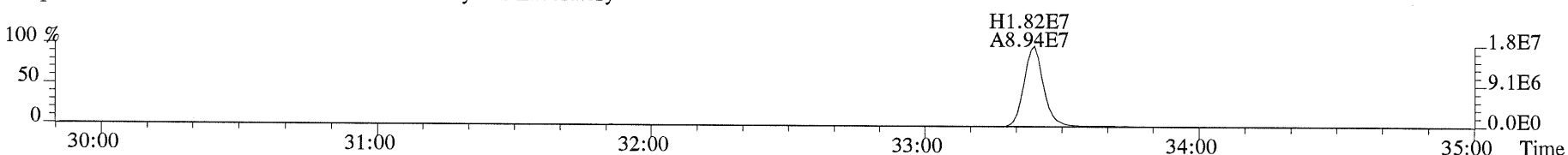
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



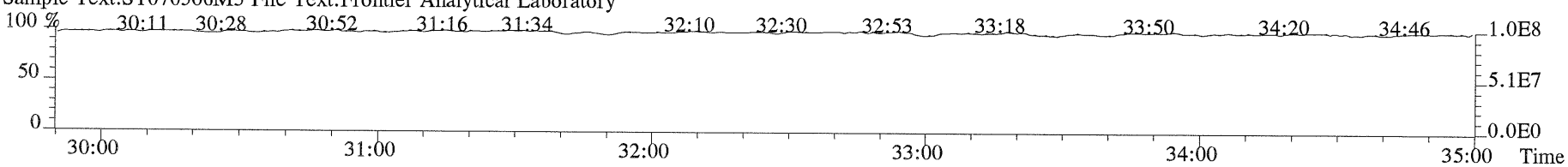
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



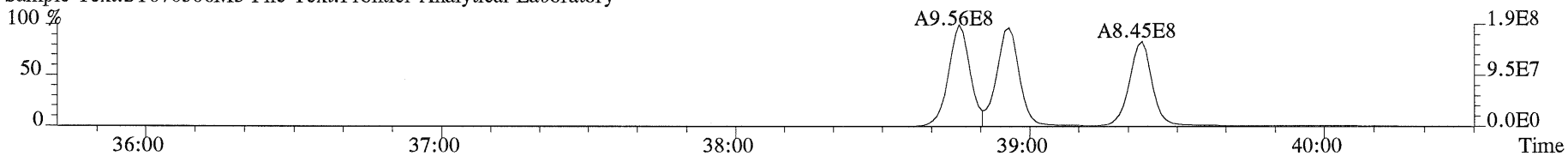
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



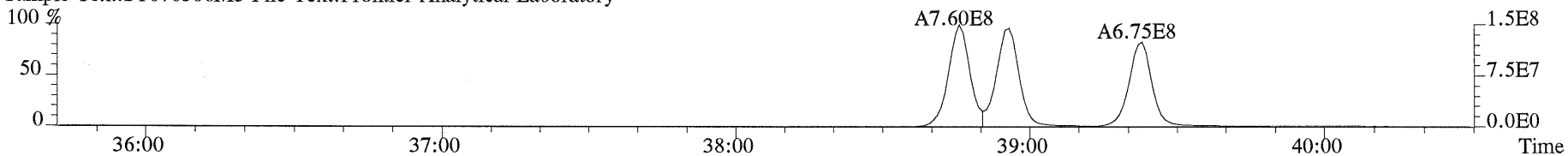
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:6 F:2 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



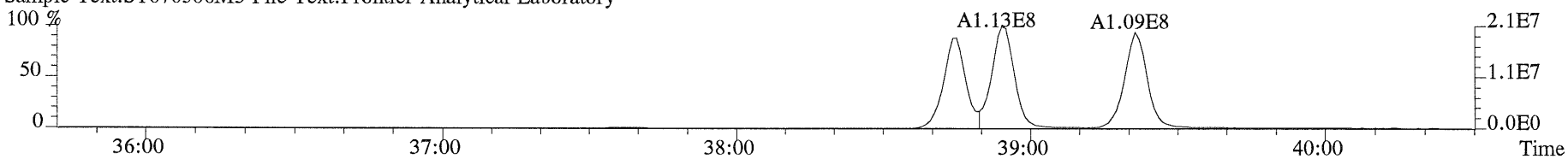
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



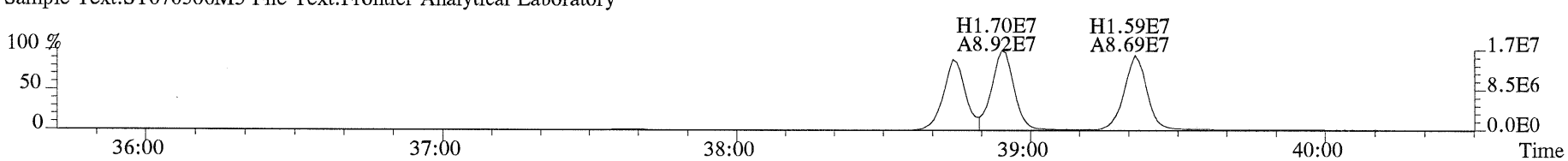
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



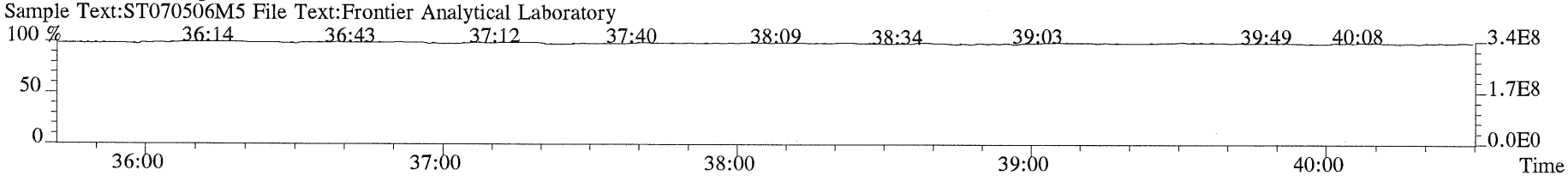
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



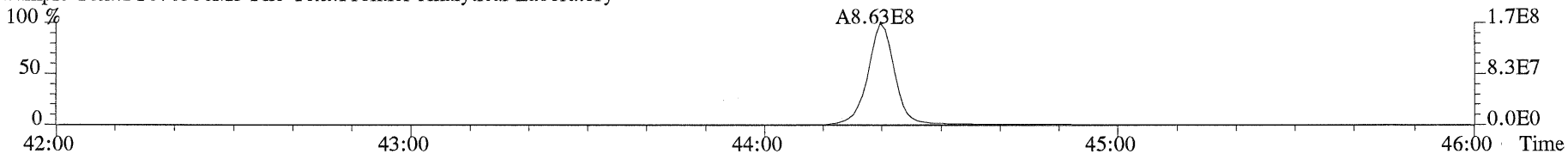
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



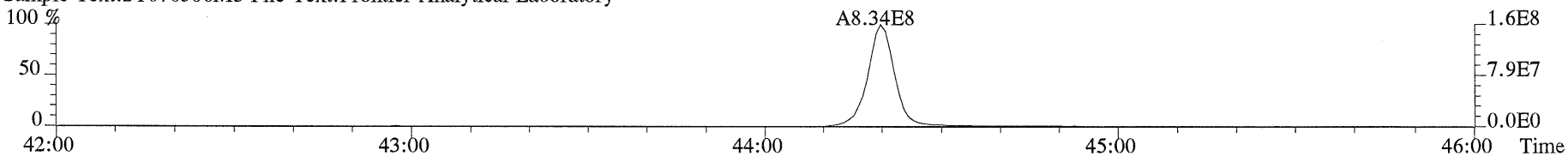
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:6 F:3 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



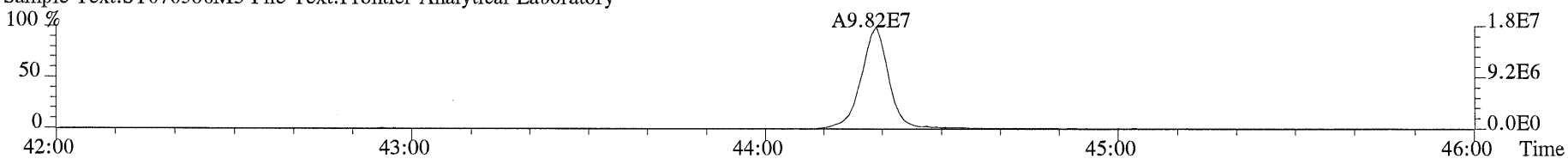
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



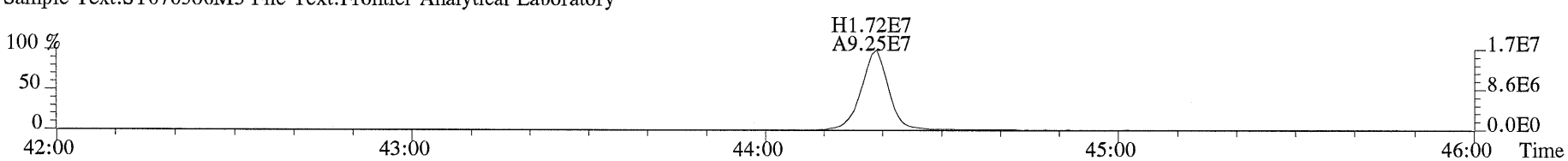
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



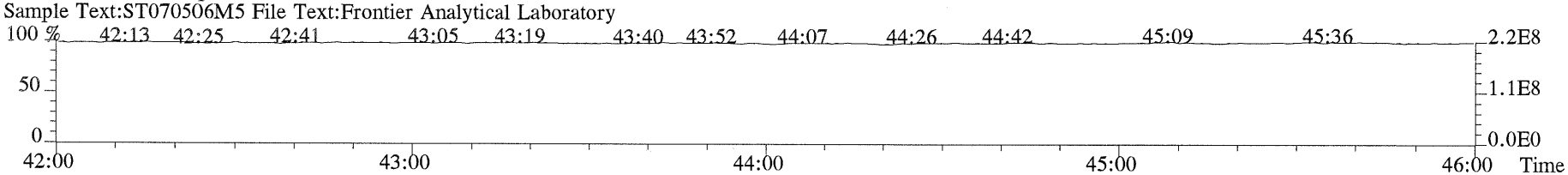
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



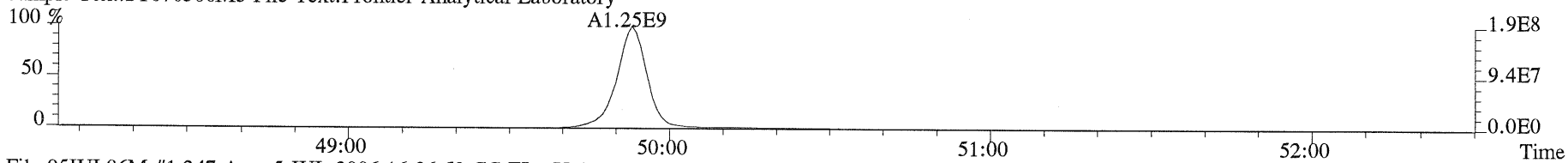
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



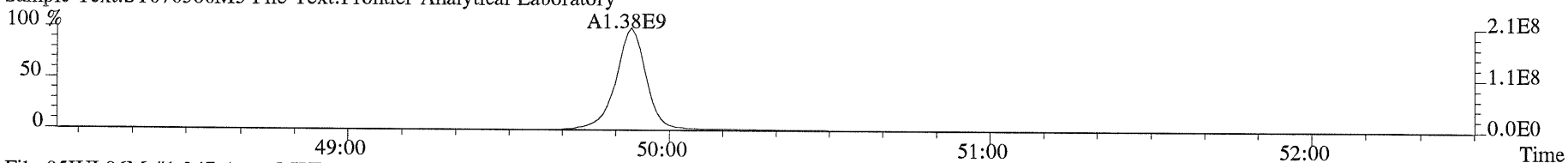
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:6 F:4 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



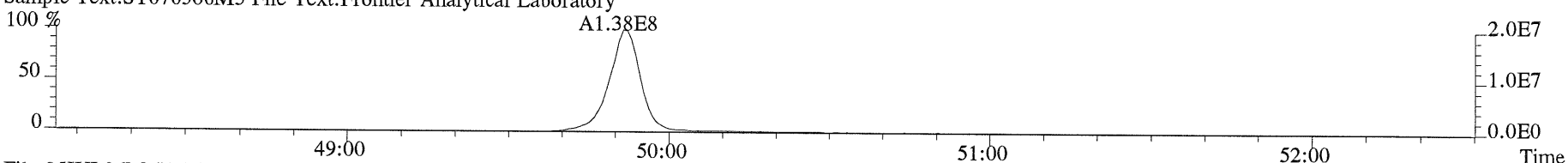
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



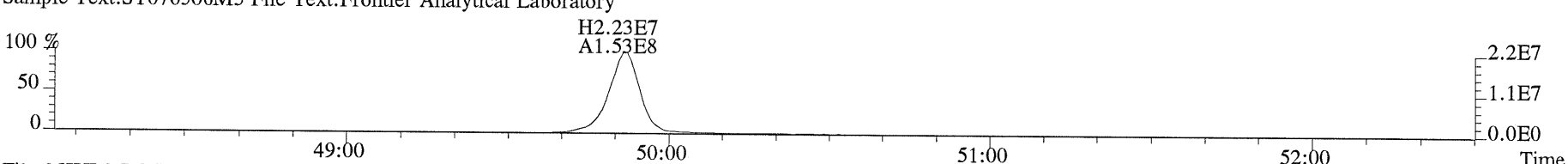
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



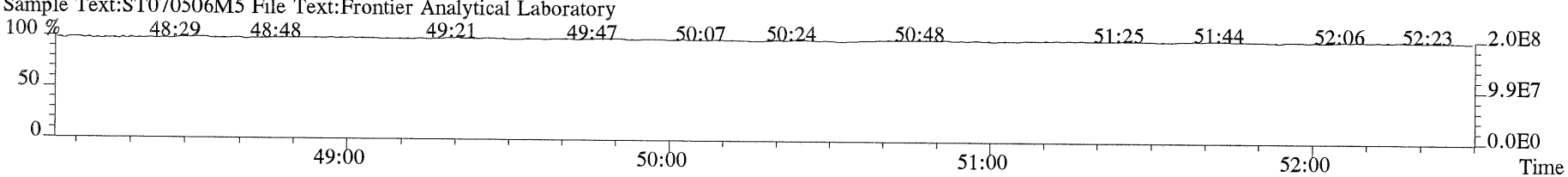
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



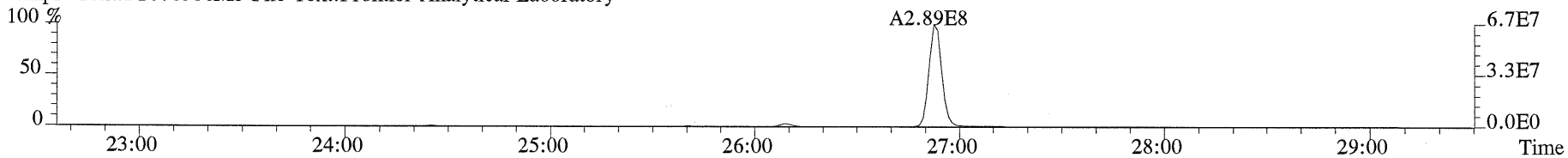
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



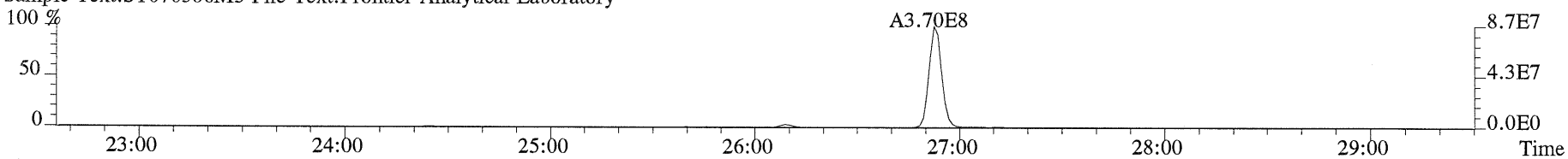
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:6 F:5 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



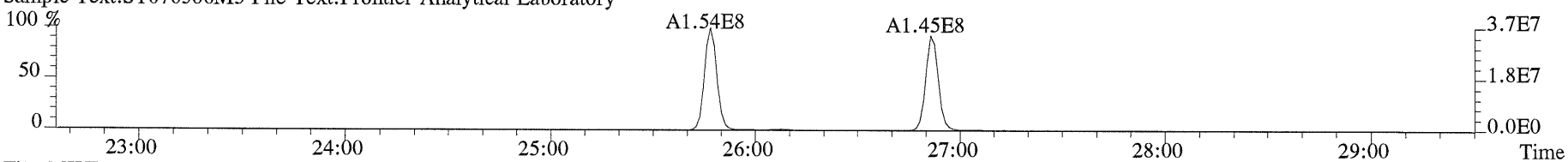
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



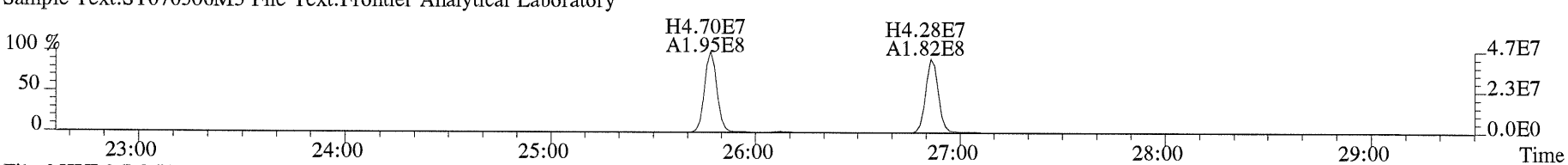
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



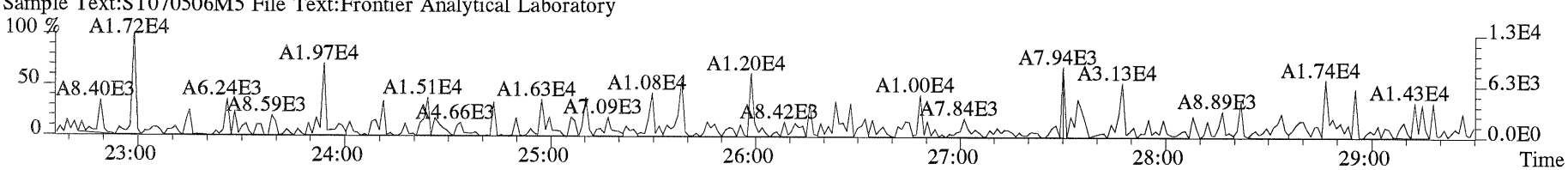
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



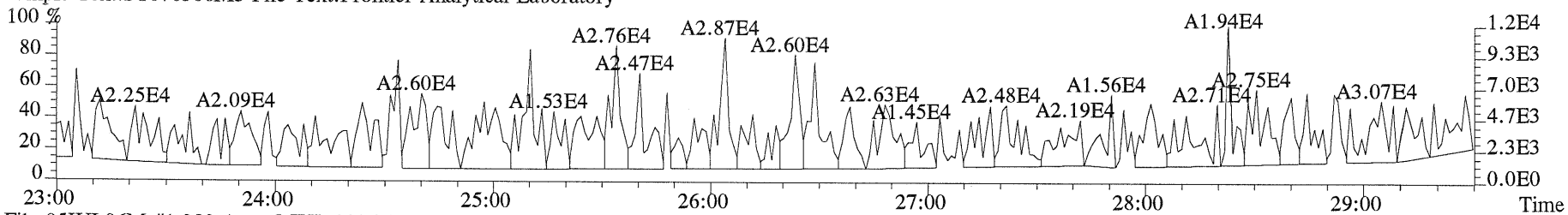
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



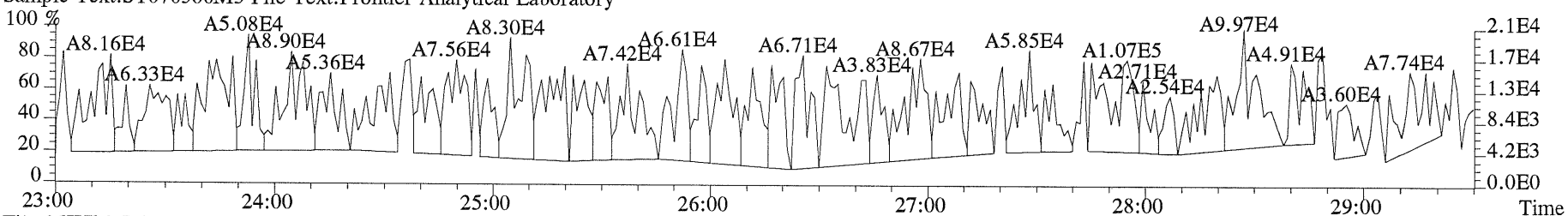
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



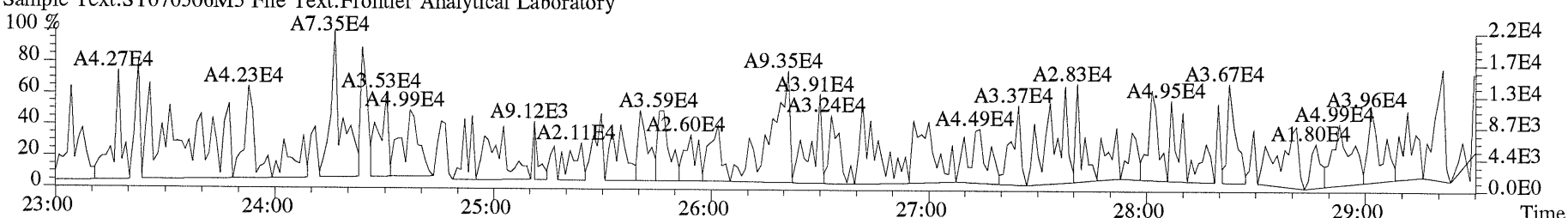
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



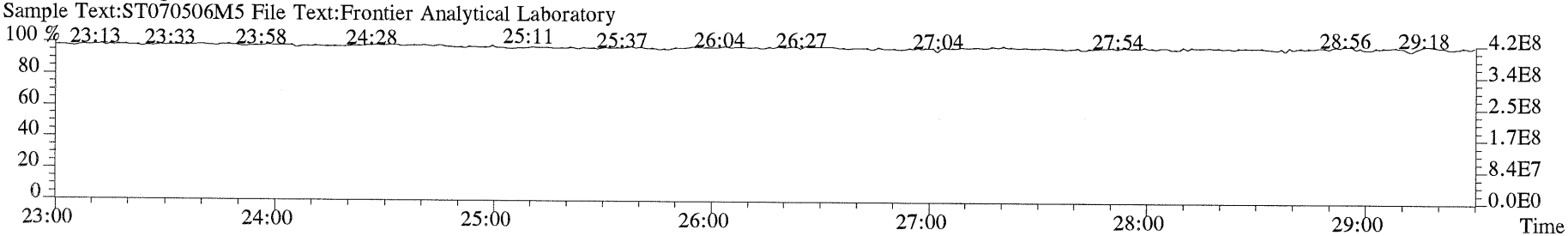
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



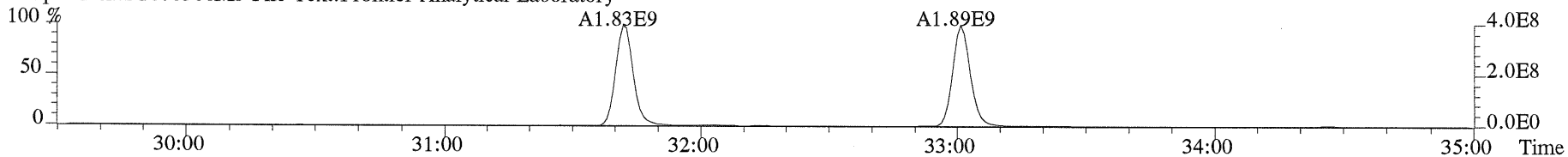
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



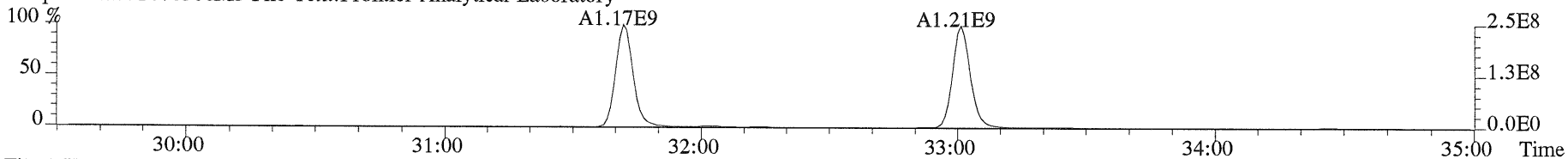
File:05JUL06M #1-390 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:6 Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



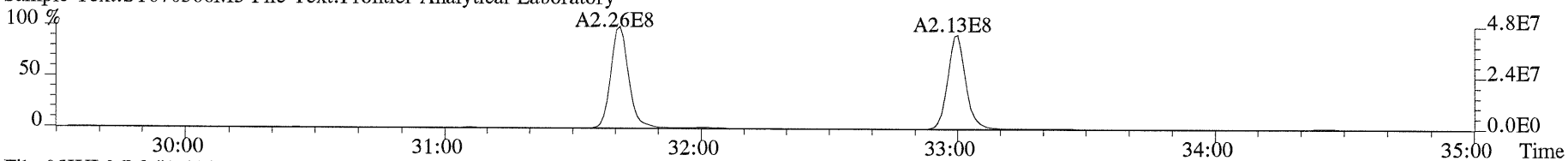
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



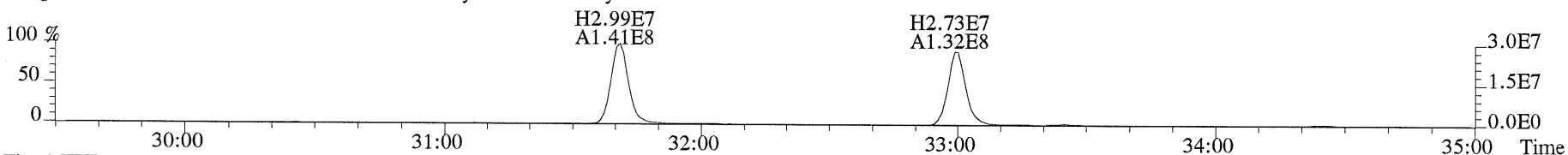
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



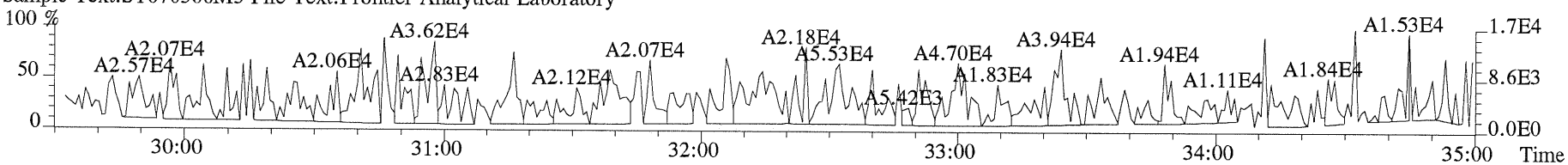
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



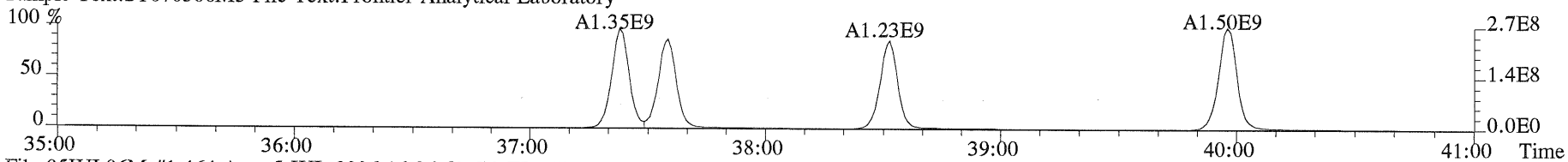
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



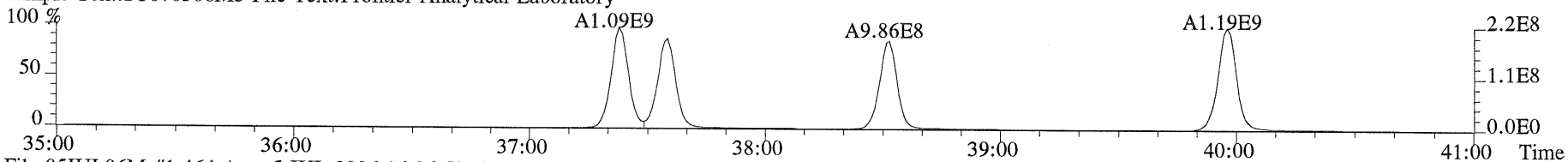
File:05JUL06M #1-424 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:6 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



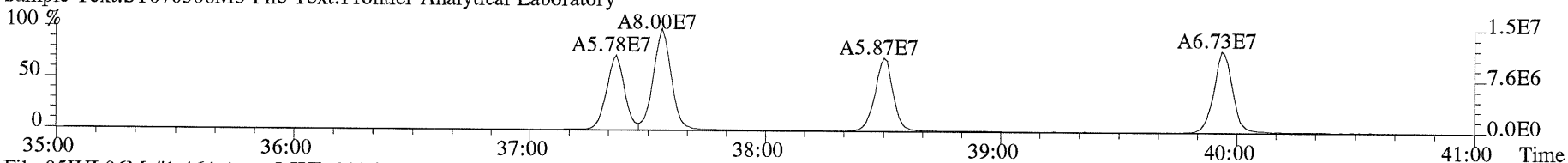
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



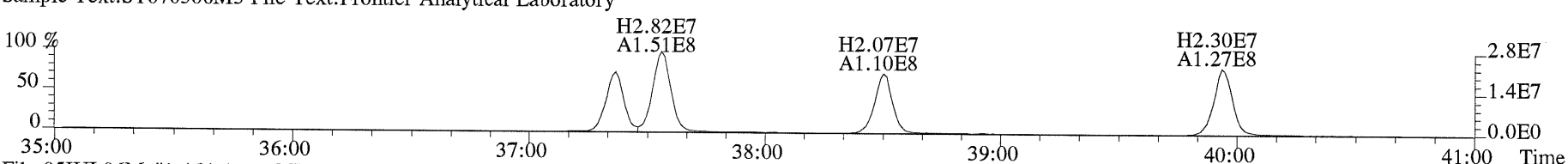
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



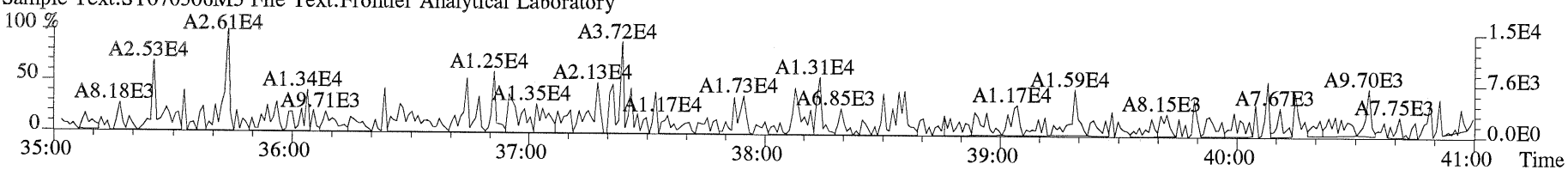
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



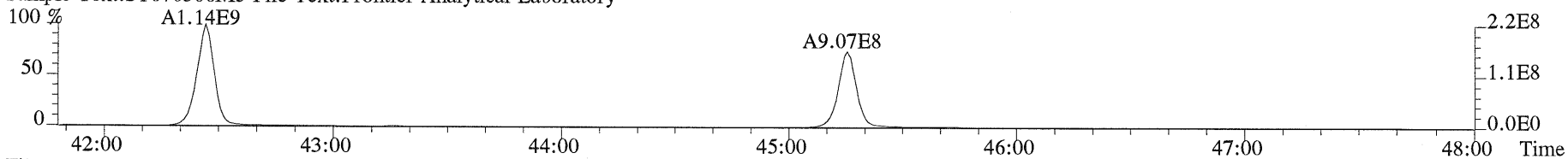
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



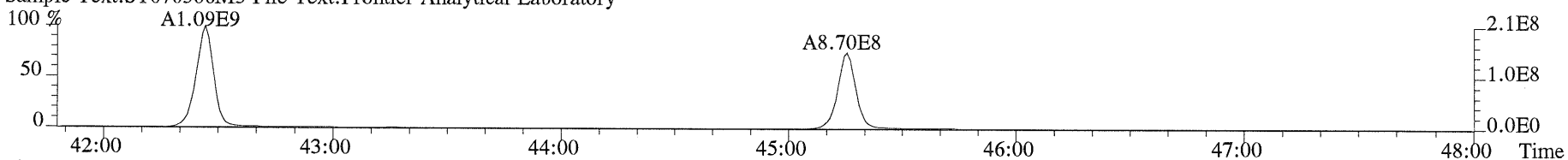
File:05JUL06M #1-464 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:6 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



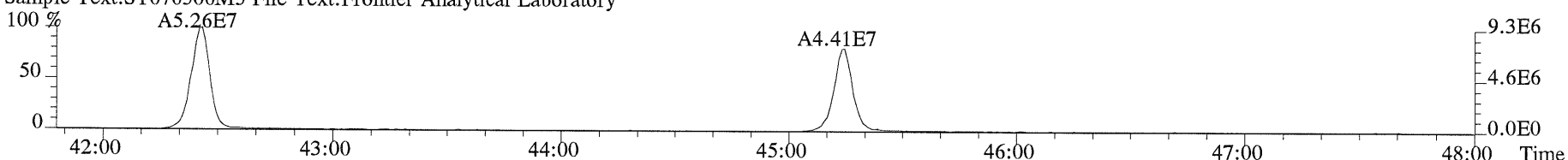
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



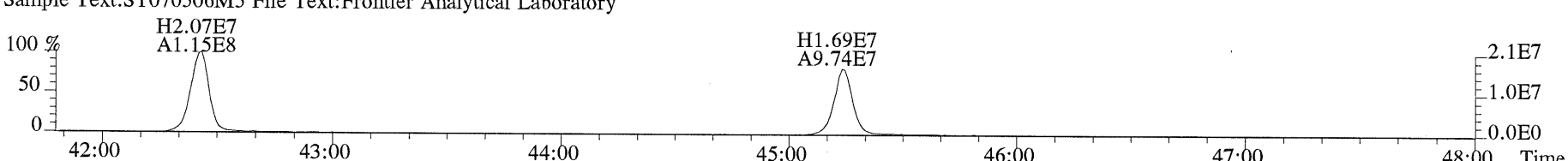
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



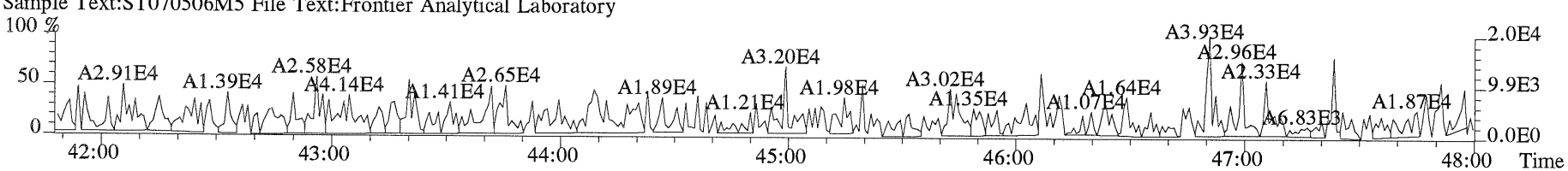
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



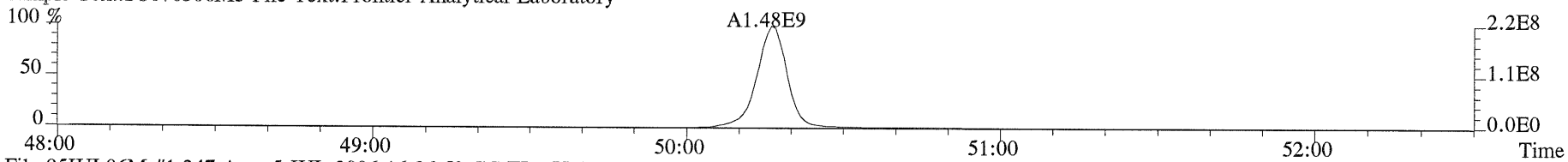
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



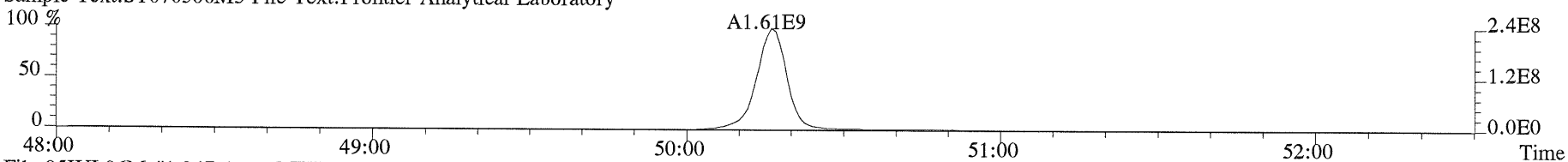
File:05JUL06M #1-541 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:6 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



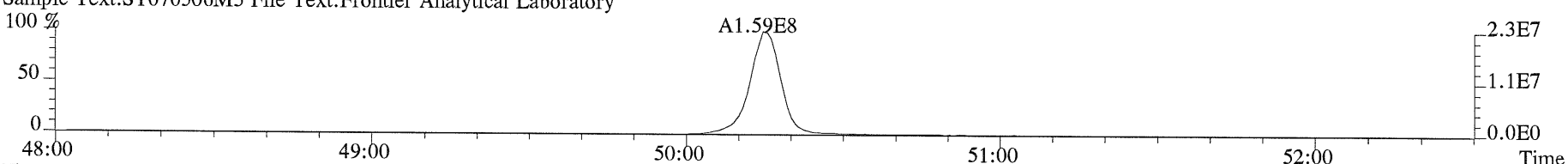
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory



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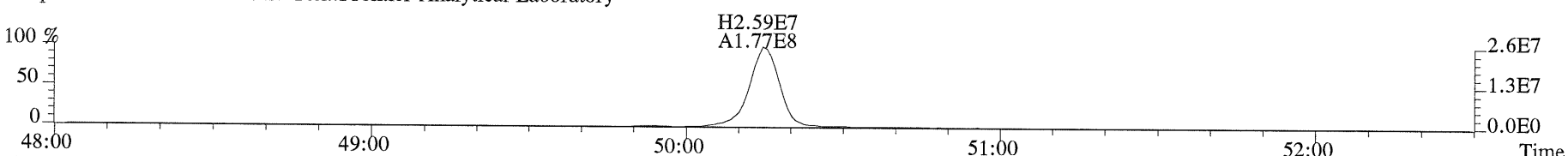
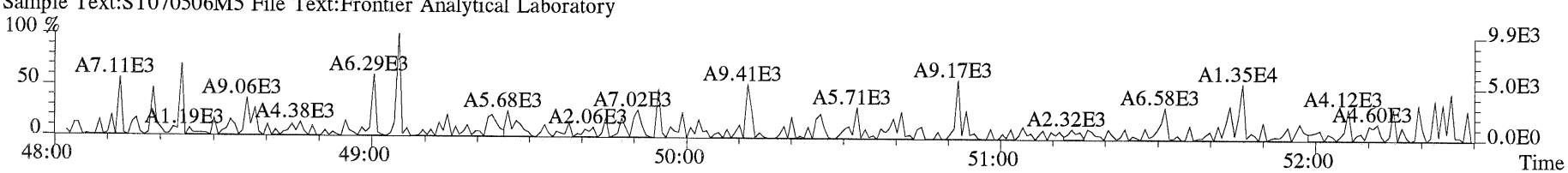
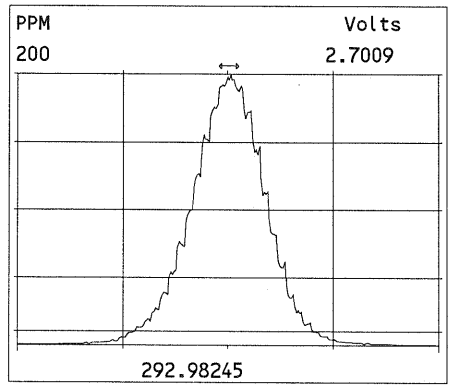
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory

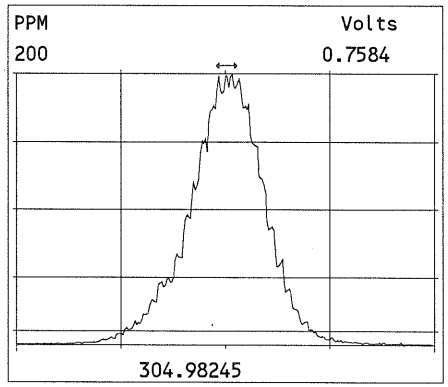


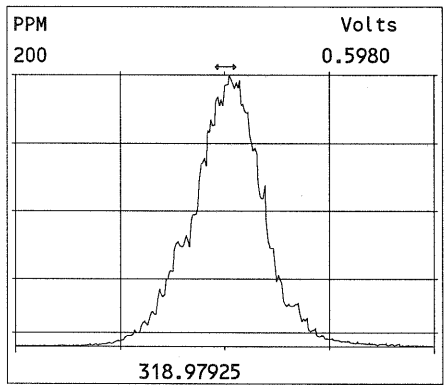
File:05JUL06M #1-347 Acq: 5-JUL-2006 16:26:53 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:6 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST070506M5 File Text:Frontier Analytical Laboratory

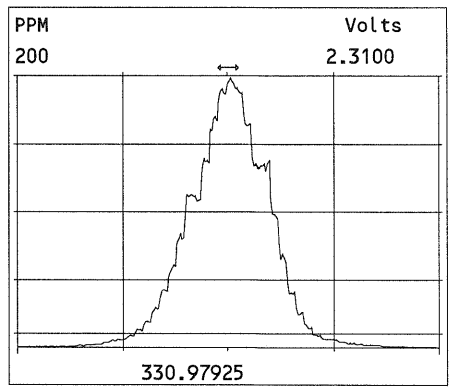


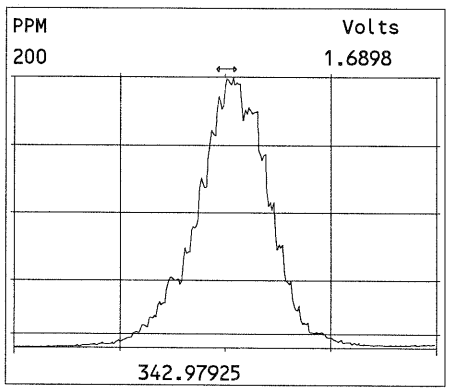
Peak Locate Examination: 6-JUL-2006:07:39 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

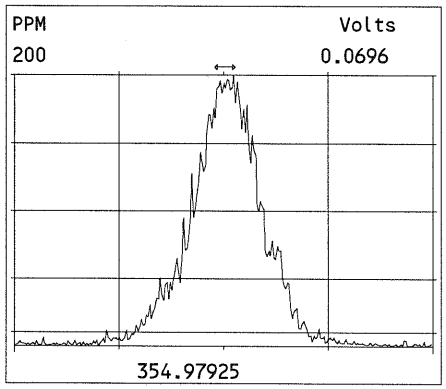


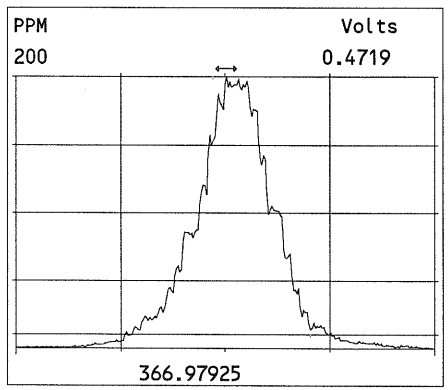


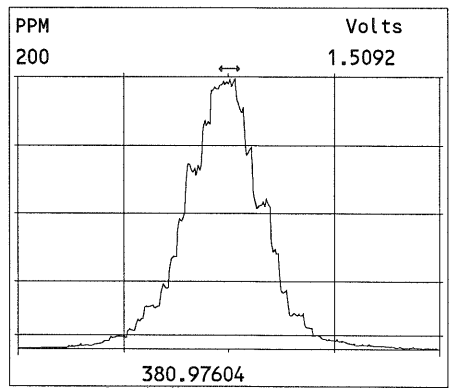


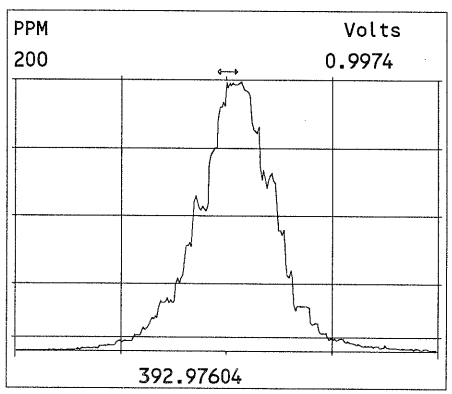


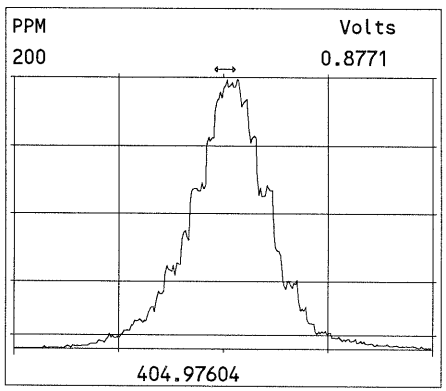


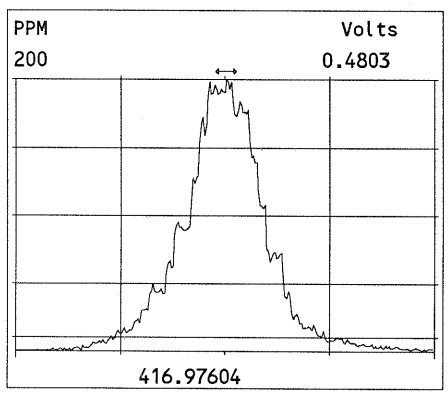




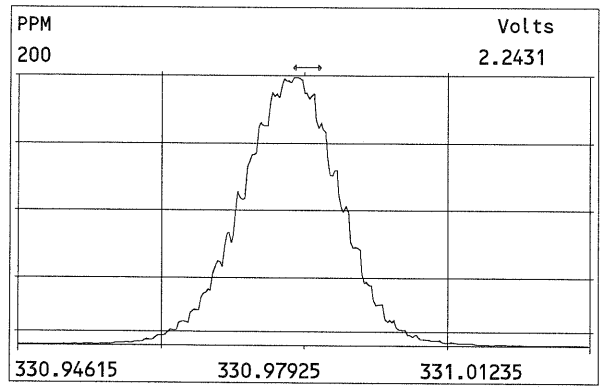


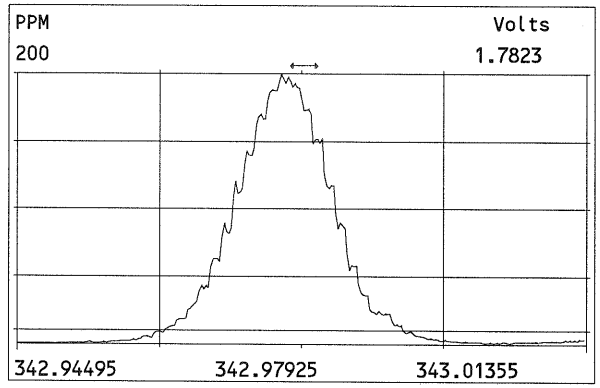


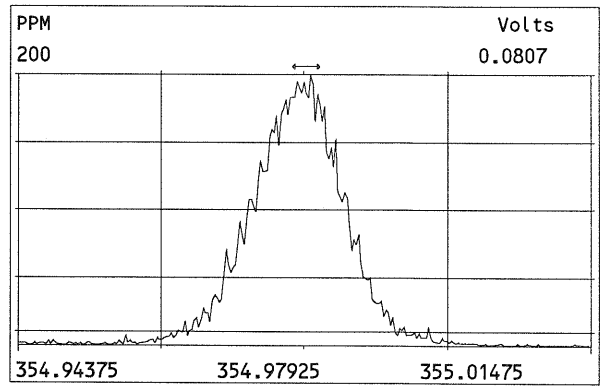


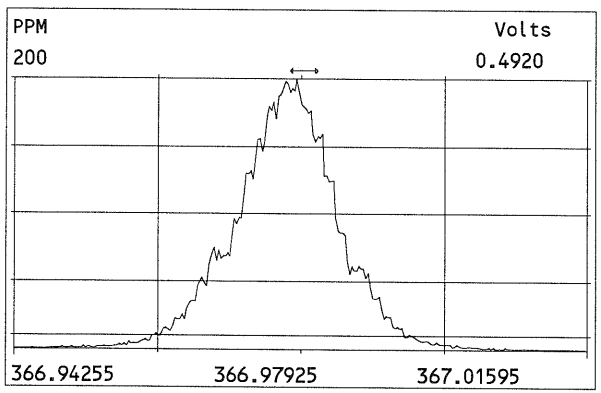


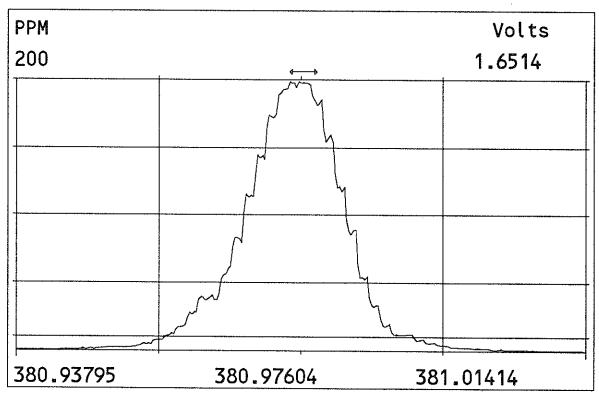
Peak Locate Examination: 6-JUL-2006:07:40 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

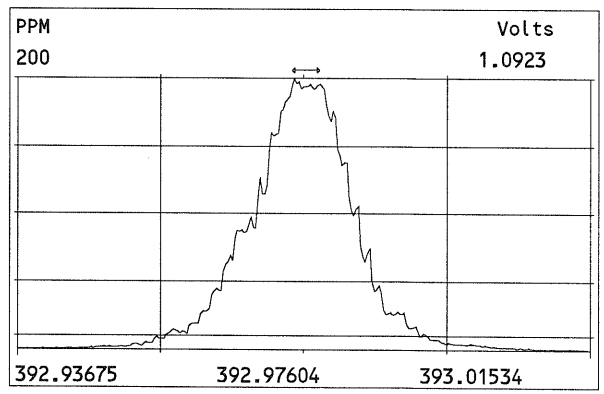


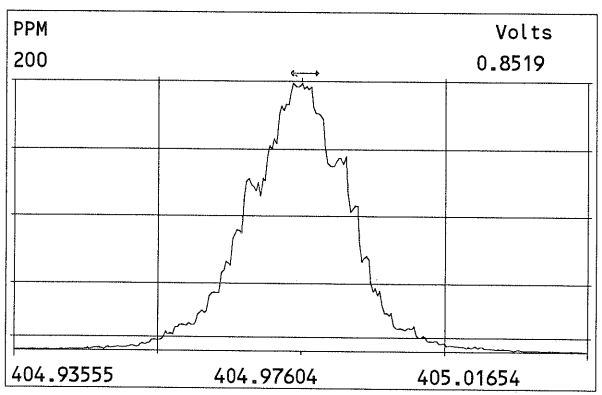


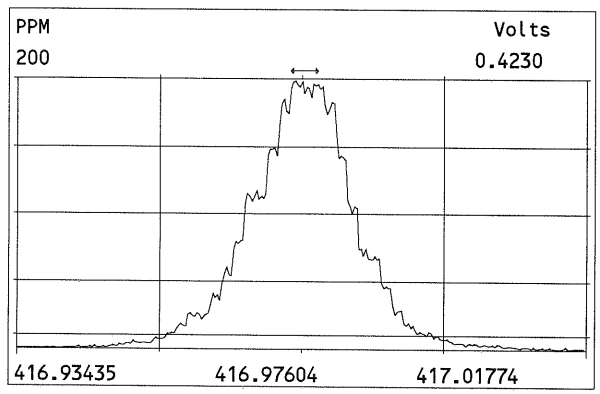




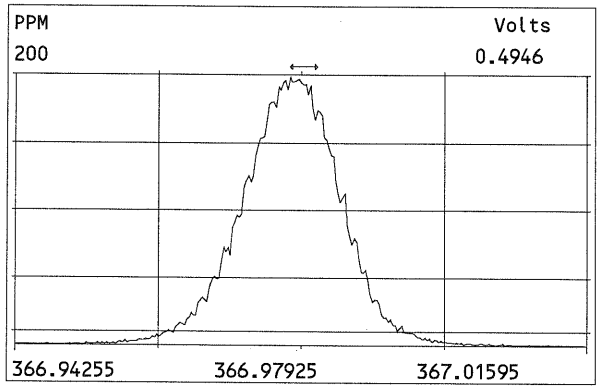


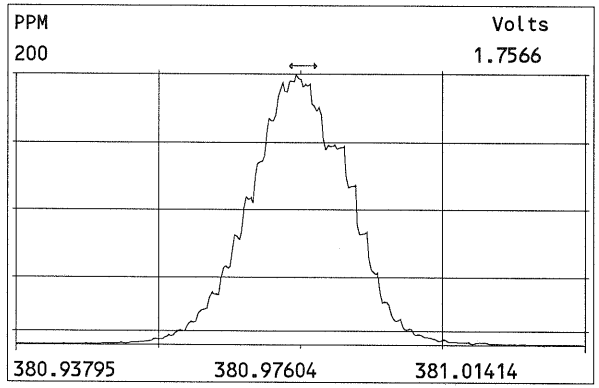


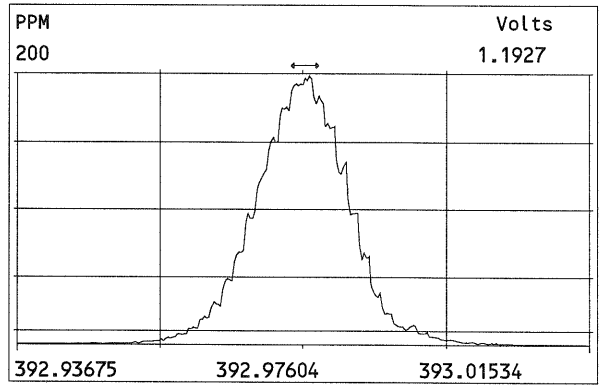


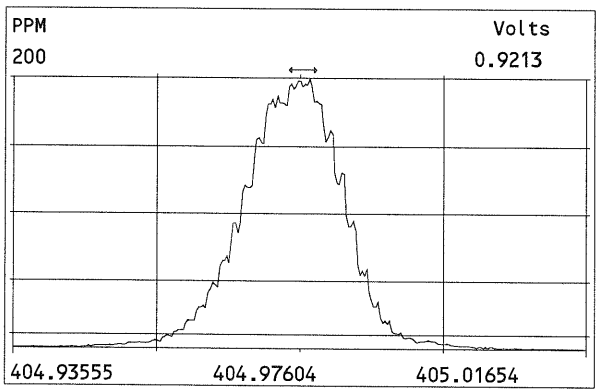


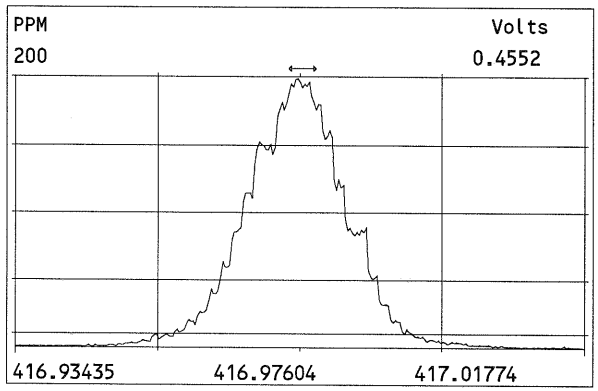
Peak Locate Examination: 6-JUL-2006:07:40 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

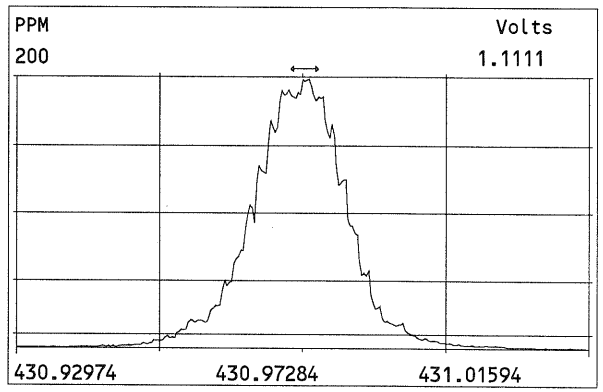


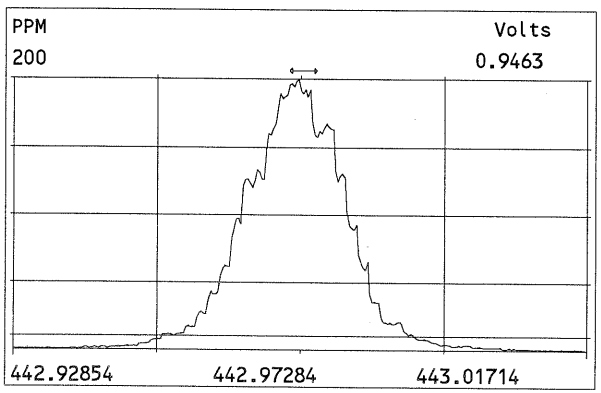


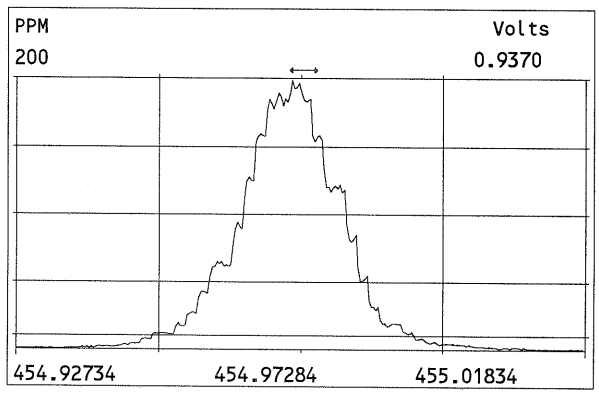




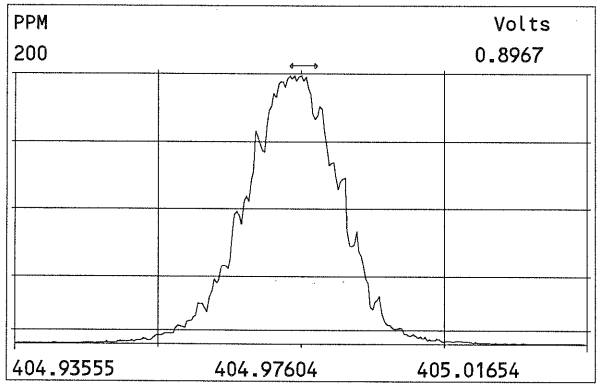


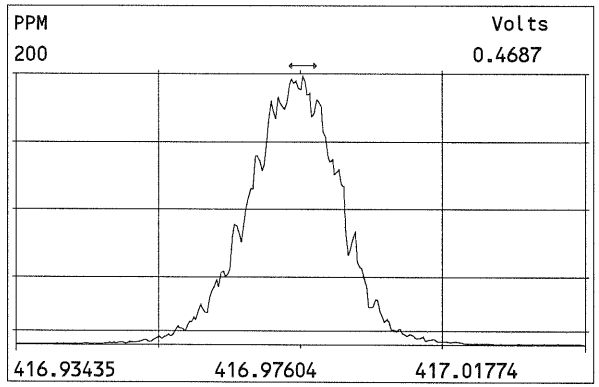


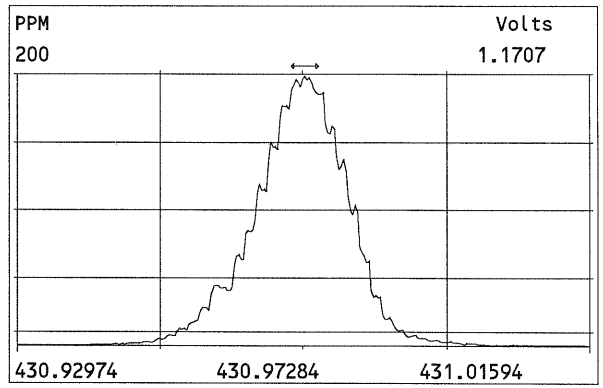


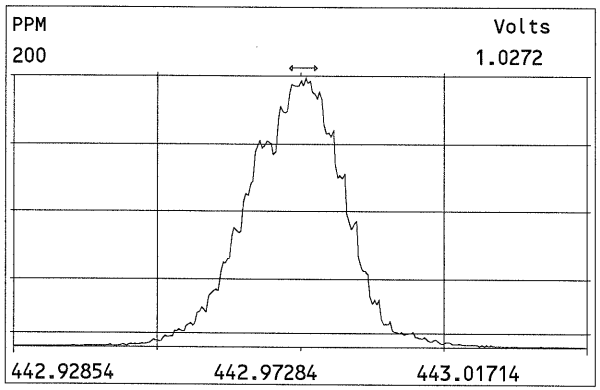


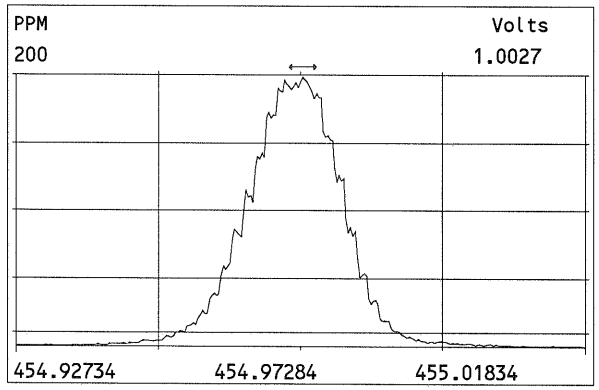
Peak Locate Examination: 6-JUL-2006:07:41 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

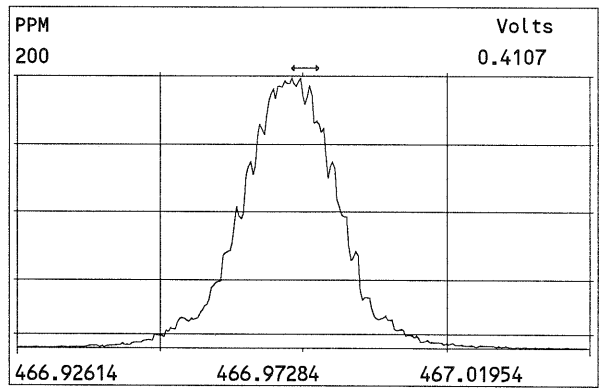


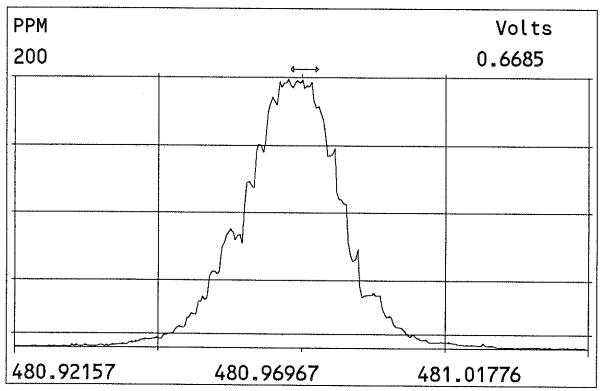




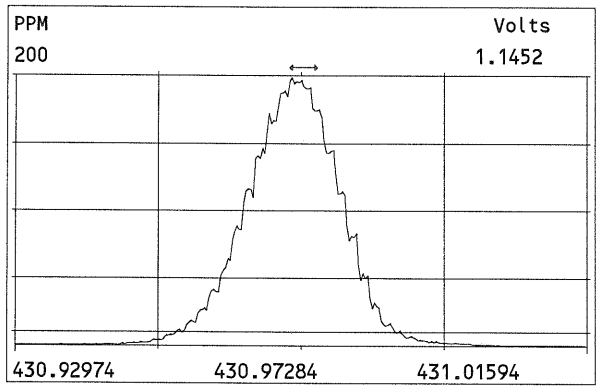


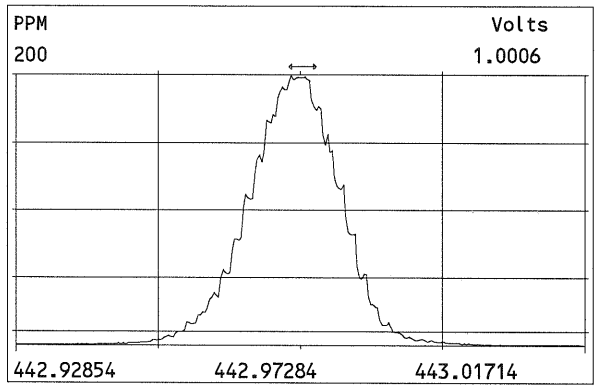


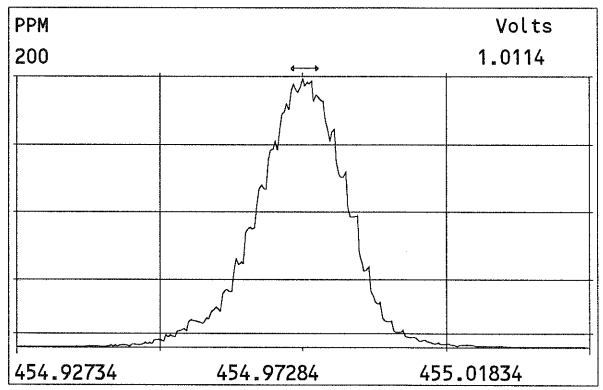


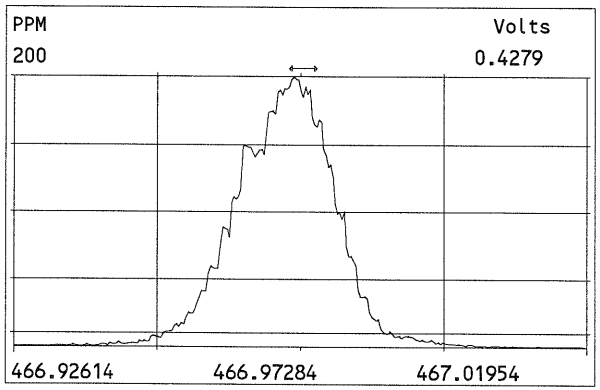


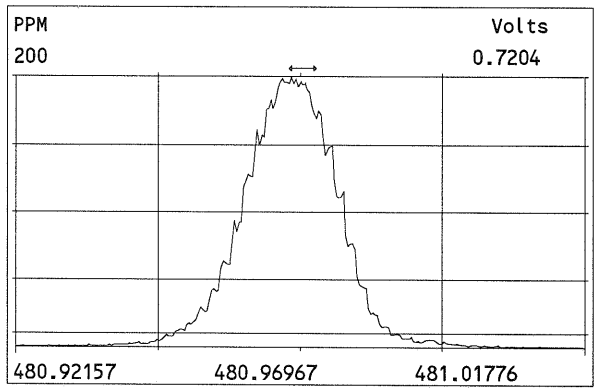
Peak Locate Examination: 6-JUL-2006:07:41 File:05JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

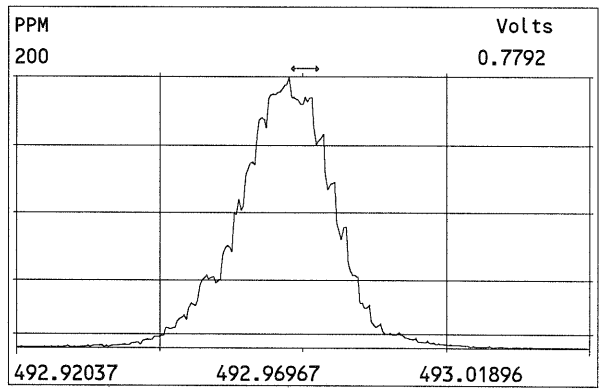


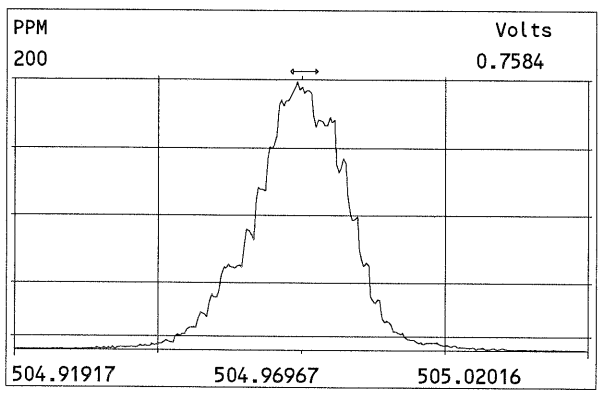


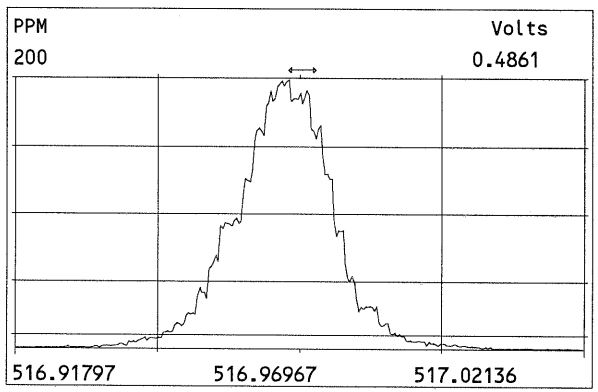












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 14:41:35

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	8.59	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	48.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	48.7	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	47.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	y	48.0	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	96.4	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	8.58	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	49.6	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	49.2	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	50.7	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	50.3	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	49.4	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	98.9	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: DJ Date: 7/25/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 14:41:35

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	98.6	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	89.0	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	95.3	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	y	96.2	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	107	72.0 - 138
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	229	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	99.5	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	93.1	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	90.3	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.4	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.50	0.43-0.59	y	91.0	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	91.6	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	95.1	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	97.3	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	101	77.0 - 129
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	216	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					7.80	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: DN Date: 7/25/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 Time: 14:41:35

DB-5 IS Data Filename: 25JUL06M Sam:1 Analysis Date: 25-JUL-06 Time: 14:41:35

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:24	1,3,6,8-TCDF (F)	23:03
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:25
1,2,3,8,9-PeCDD (L)	33:47	1,2,3,8,9-PeCDF (L)	34:12
1,2,4,6,7,9-HxCDD (F)	36:06	1,2,3,4,6,8-HxCDF (F)	35:13
1,2,3,7,8,9-HxCDD (L)	39:09	1,2,3,7,8,9-HxCDF (L)	39:43
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:14
1,2,3,4,6,7,8-HpCDD (L)	44:07	1,2,3,4,7,8,9-HpCDF (L)	45:02

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DN Date: 7/25/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 14:41:35 CS3 or VER Data Filename: 25JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.237	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.173	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.223	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DN Date: 7/25/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 14:41:35 CS3 or VER Data Filename: 25JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DPJ Date: 7/25/06

FAL ID: ST072506M1 Filename: 25JUL06M Sam:1 Acquired: 25-JUL-06 14:41:35 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072506M1 EndCal: ST072506M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.0
WHO 1998 Tox: 121

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.29e+07	0.77 y	27:25	1.10	8.59		2.50	-	*	
1,2,3,7,8-PeCDD	5.11e+07	1.59 y	33:12	0.90	48.0		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.14e+07	1.27 y	38:33	0.96	48.7		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.24e+07	1.25 y	38:42	0.83	47.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.78e+07	1.24 y	39:09	0.77	49.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	4.35e+07	1.02 y	44:07	0.86	48.0		2.50	-	*	
OCDD	7.05e+07	0.87 y	49:38	0.87	96.4		2.50	-	*	
2,3,7,8-TCDF	1.57e+07	0.77 y	26:40	0.99	8.58		2.50	-	*	
1,2,3,7,8-PeCDF	7.29e+07	1.58 y	31:29	0.80	49.6		2.50	-	*	
2,3,4,7,8-PeCDF	7.26e+07	1.57 y	32:47	0.88	49.2		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.91e+07	1.26 y	37:10	1.42	50.7		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.58e+07	1.25 y	37:22	0.97	50.1		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.29e+07	1.24 y	38:18	1.26	50.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	6.49e+07	1.27 y	39:43	1.34	50.5		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.58e+07	1.04 y	42:14	1.28	50.3		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.37e+07	1.03 y	45:02	1.22	49.4		2.50	-	*	
OCDF	8.11e+07	0.90 y	50:00	0.90	98.9		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.36e+08	0.77 y	27:23	1.00	98.6					98.6
13C-1,2,3,7,8-PeCDD	1.18e+08	1.59 y	33:10	0.96	89.0					89.0
13C-1,2,3,4,7,8-HxCDD	8.87e+07	1.28 y	38:31	0.90	95.3					95.3
13C-1,2,3,6,7,8-HxCDD	1.08e+08	1.30 y	38:41	1.09	96.2					96.2
13C-1,2,3,4,6,7,8-HpCDD	1.05e+08	1.06 y	44:06	0.96	107					107
13C-OCDD	1.68e+08	0.90 y	49:37	0.71	229					114
13C-2,3,7,8-TCDF	1.84e+08	0.78 y	26:39	0.94	99.5					99.5
13C-1,2,3,7,8-PeCDF	1.84e+08	1.59 y	31:27	1.00	93.1					93.1
13C-2,3,4,7,8-PeCDF	1.68e+08	1.59 y	32:46	0.94	90.3					90.3
13C-1,2,3,4,7,8-HxCDF	8.18e+07	0.51 y	37:08	0.86	92.4					92.4
13C-1,2,3,6,7,8-HxCDF	1.15e+08	0.50 y	37:20	1.23	91.0					91.0
13C-2,3,4,6,7,8-HxCDF	8.34e+07	0.51 y	38:17	0.88	91.6					91.6
13C-1,2,3,7,8,9-HxCDF	9.62e+07	0.51 y	39:43	0.98	95.1					95.1
13C-1,2,3,4,6,7,8-HpCDF	8.65e+07	0.43 y	42:13	0.86	97.3					97.3
13C-1,2,3,4,7,8,9-HpCDF	7.27e+07	0.42 y	45:01	0.70	101					101
13C-OCDF	1.83e+08	0.89 y	49:59	0.82	216					108
37Cl-2,3,7,8-TCDD	8.74e+06		27:24	0.81	7.80					78.0
13C-1,2,3,4-TCDD	1.38e+08	0.79 y	26:48	-	72.3					
13C-1,2,3,4-TCDF	1.98e+08	0.77 y	25:33	-	68.7					
13C-1,2,3,7,8,9-HxCDD	1.03e+08	1.32 y	39:08	-	69.0					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.38e+07		24:06	1.10	35.9		2.50	-	*	20
Total Penta-Dioxins	1.37e+08		30:15	0.90	129		2.50	-	*	14
Total Hexa-Dioxins	1.69e+08		36:06	0.85	203		2.50	-	*	17
Total Hepta-Dioxins	8.36e+07		42:46	0.86	92.2		2.50	-	*	16
Total Tetra-Furans	6.03e+07		23:03	0.99	32.9		2.50	-	*	27
1st Fn. Tot Penta-Furans	7.37e+07		28:25	0.84	50.0		2.50	-	*	1 PeCDF
Total Penta-Furans	1.97e+08		30:10	0.84	134		2.50	-	*	14 184
Total Hexa-Furans	2.95e+08		35:13	1.22	256		2.50	-	*	17
Total Hepta-Furans	1.02e+08		42:14	1.25	102		2.50	-	*	16

Analyst: DPJ Date: 7/25/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:25JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

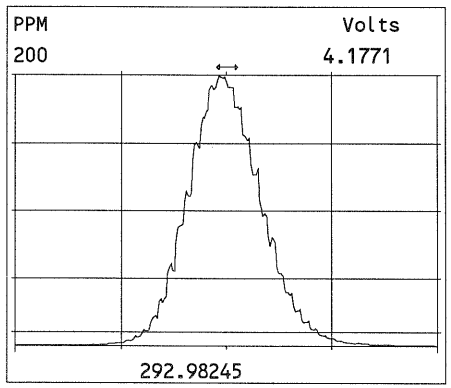
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
25JUL06M	1	ST072506M1	1613 CS3 (051212J)	25-JUL-06 14:41:35	ST072506M1	ST072506M2	DV
25JUL06M	2	3969-006-0001-SA	E2-B4-EP162-182	25-JUL-06 15:44:16	ST072506M1	ST072506M2	DV
25JUL06M	3	3969-009-0001-SA	E1-B1-EP85-164	25-JUL-06 16:39:41	ST072506M1	ST072506M2	DV
25JUL06M	4	SB072506M1	Solvent Blank	25-JUL-06 17:35:04	ST072506M1	ST072506M2	DV
25JUL06M	5	0913-001-0001-OPR	OPR	25-JUL-06 18:30:25	ST072506M1	ST072506M2	DV
25JUL06M	6	0913-001-0001-MB	Method Blank	25-JUL-06 19:25:45	ST072506M1	ST072506M2	DV
25JUL06M	7	3969-004-X002-SA	E8-162-T-C7@15	25-JUL-06 20:21:04	ST072506M1	ST072506M2	DV
25JUL06M	8	3969-002-X002-SA	E3-A4-EP168-181	25-JUL-06 21:16:24	ST072506M1	ST072506M2	DV
25JUL06M	9	SB072506M2	Solvent Blank	25-JUL-06 22:11:47	ST072506M1	ST072506M2	DV
25JUL06M	10	ST072506M2	1613 CS3 (051212J)	25-JUL-06 23:07:06	ST072506M1	ST072506M2	DV
25JUL06M	11	3956-001-0001-SA	IG7-S1	26-JUL-06 00:02:34	ST072506M2	ST072506M3	DV
25JUL06M	12	3963-001-0001-SA	061409-08	26-JUL-06 00:58:02	ST072506M2	ST072506M3	DV
25JUL06M	13	3963-002-0001-SA	061409-09	26-JUL-06 01:53:21	ST072506M2	ST072506M3	DV
25JUL06M	14	3963-003-0001-SA	061409-10	26-JUL-06 02:48:37	ST072506M2	ST072506M3	DV
25JUL06M	15	3967-001-0001-SA	C-4, S-1	26-JUL-06 03:43:56	ST072506M2	ST072506M3	DV
25JUL06M	16	3968-001-0001-SA	STC-1	26-JUL-06 04:39:22	ST072506M2	ST072506M3	DV
25JUL06M	17	3968-002-0001-SA	STC-2	26-JUL-06 05:34:41	ST072506M2	ST072506M3	DV
25JUL06M	18	3968-003-0001-SA	STC-3	26-JUL-06 06:30:01	ST072506M2	ST072506M3	DV
25JUL06M	19	3968-004-0001-SA	STC-4	26-JUL-06 07:25:21	ST072506M2	ST072506M3	DV
25JUL06M	20	SB072506M3	Solvent Blank	26-JUL-06 08:20:42	ST072506M2	ST072506M3	DV
25JUL06M	21	ST072506M3	1613 CS3 (051212J)	26-JUL-06 09:16:01	ST072506M2	ST072506M3	DV

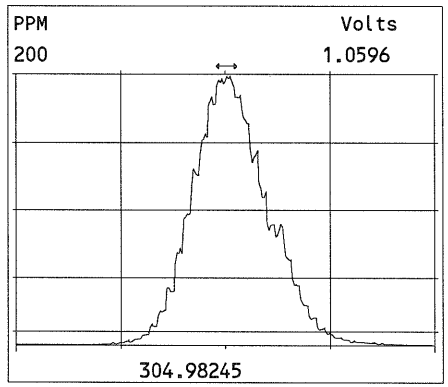
7/26/06

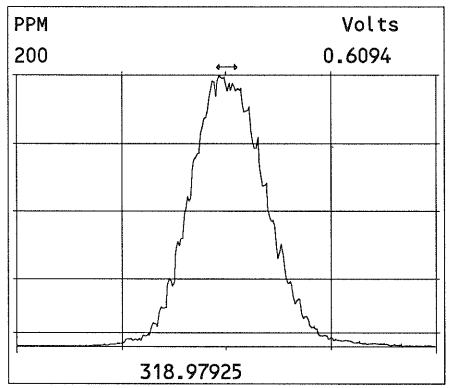
Data Backed Up:_____

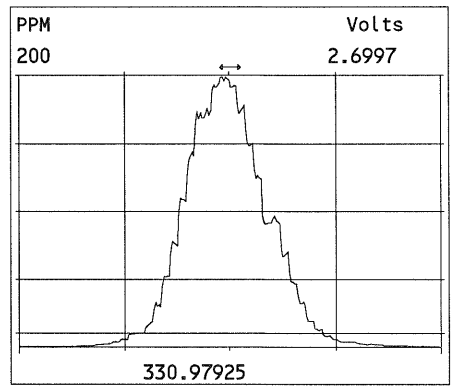
Date:_____

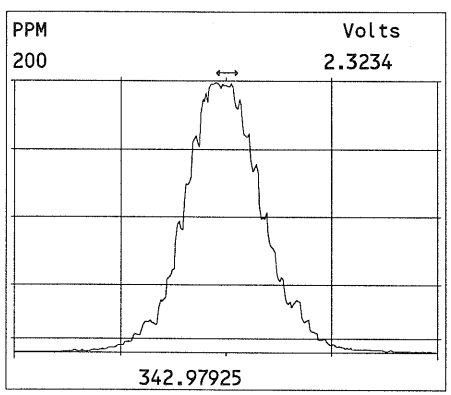
Peak Locate Examination:25-JUL-2006:14:39 File:25JUL06M
Experiment:PCDD Function:1 Reference:PFK

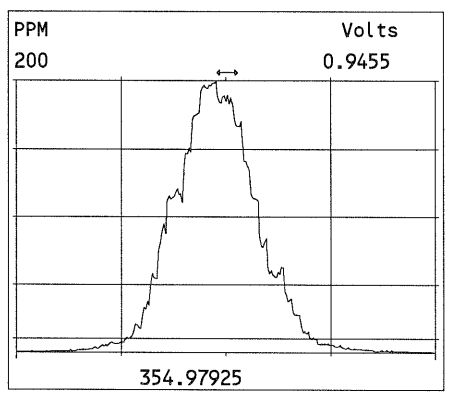


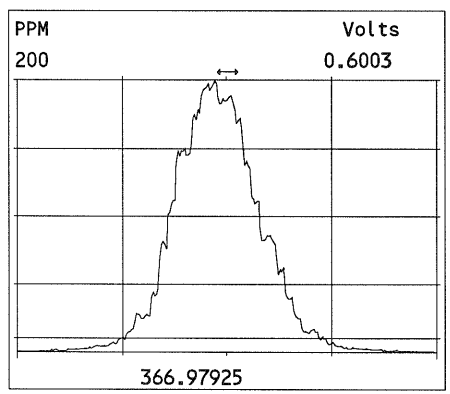


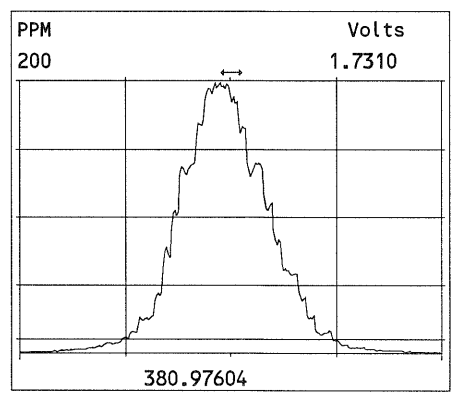


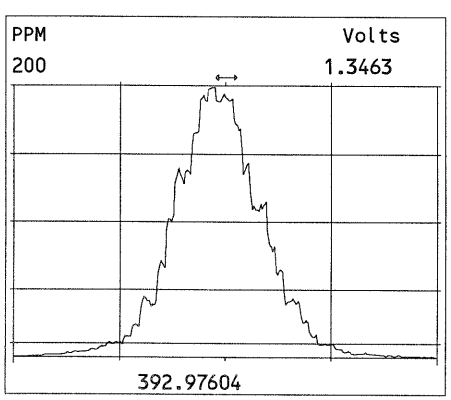


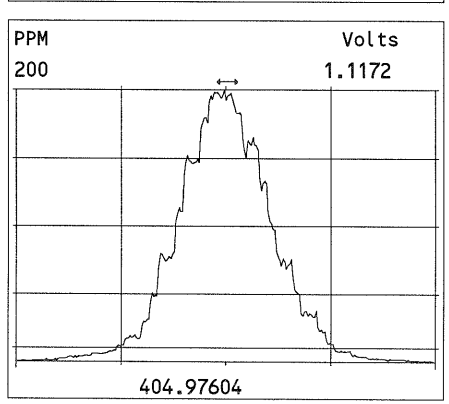


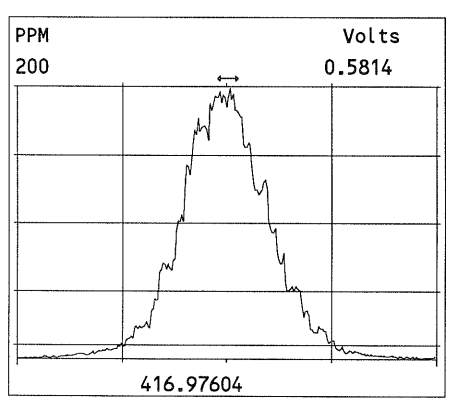




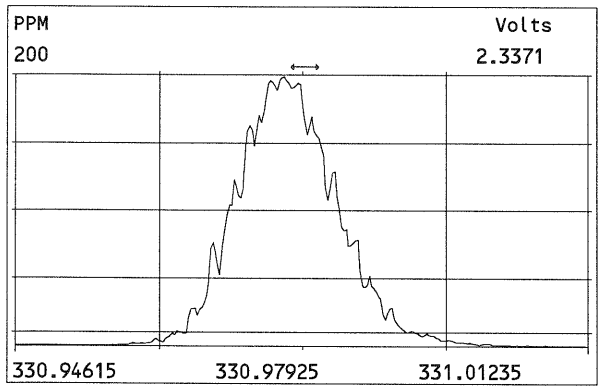


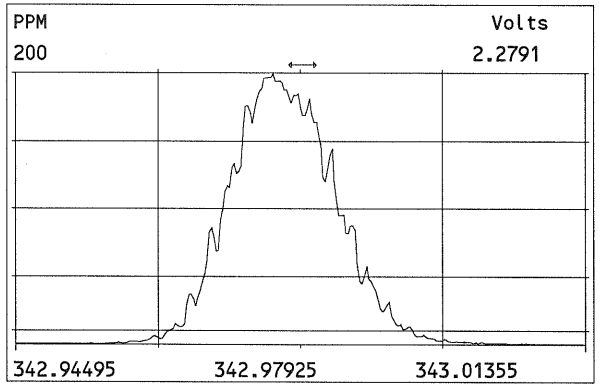


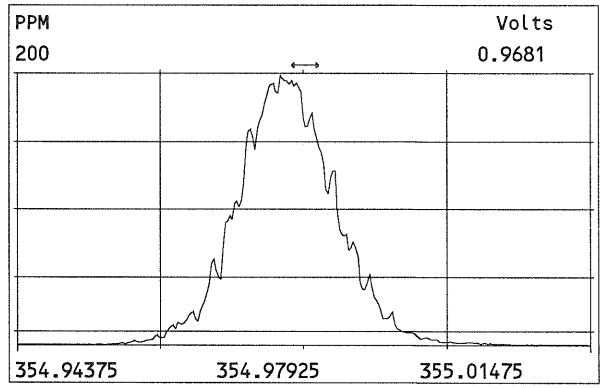


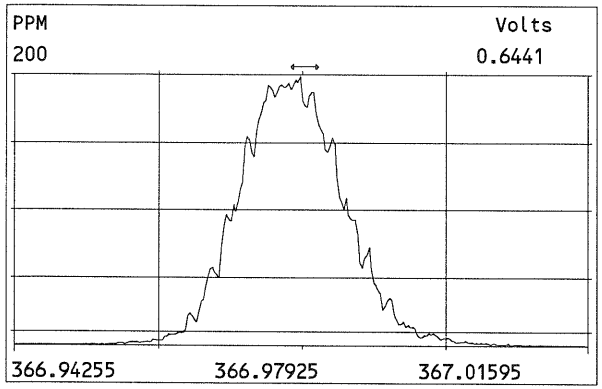


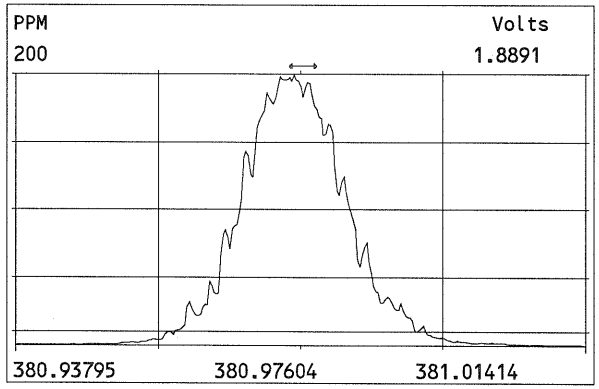
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:2 Reference:PFK

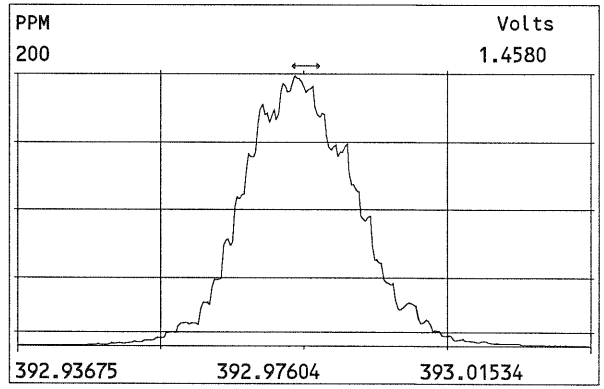


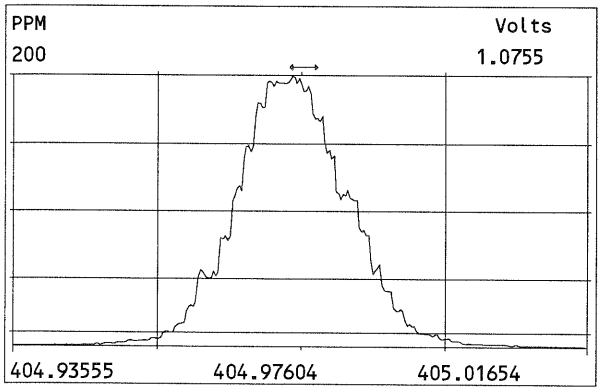


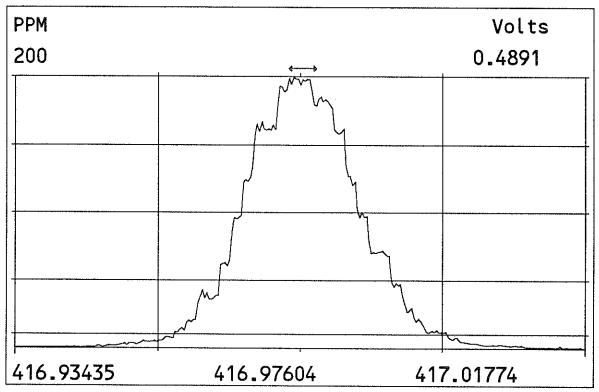




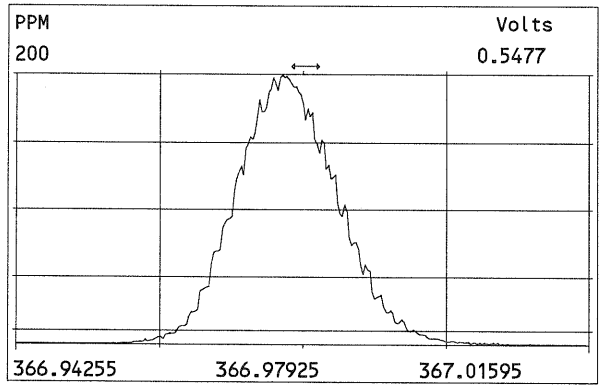


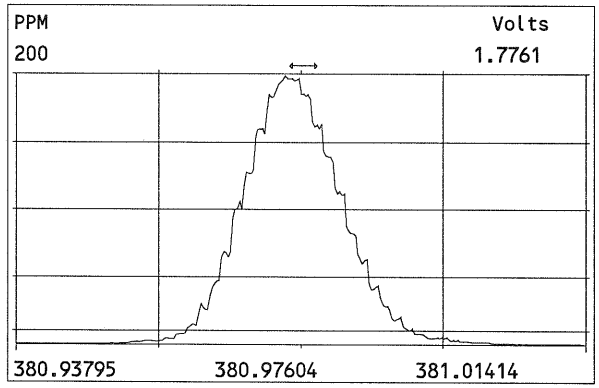


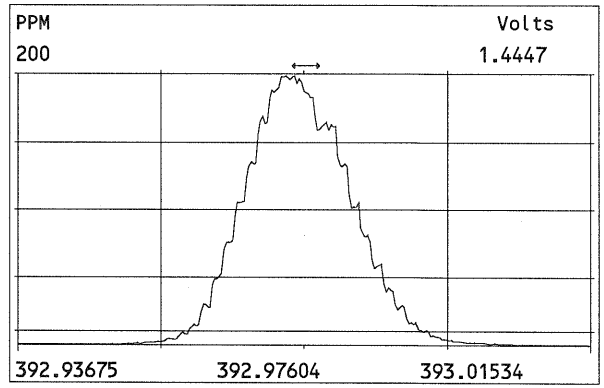


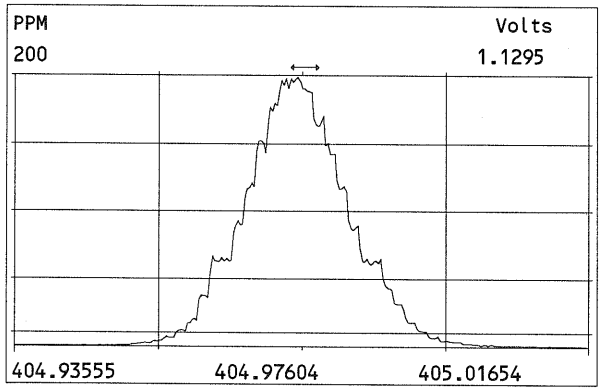


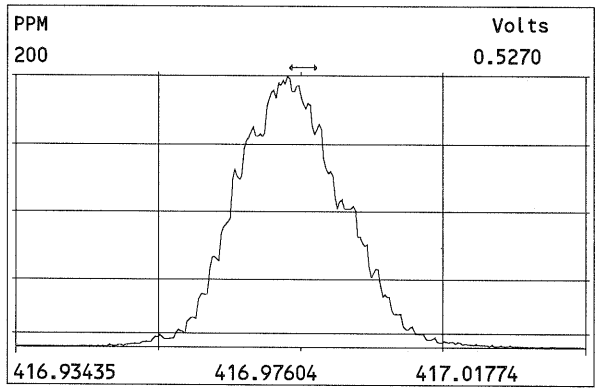
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:3 Reference:PFK

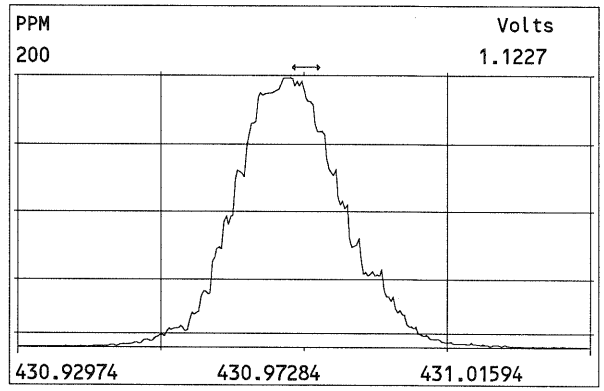


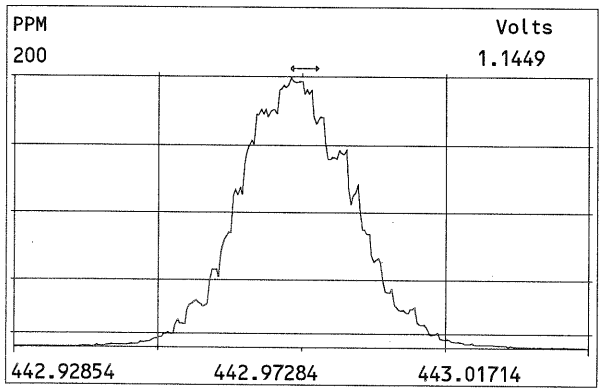


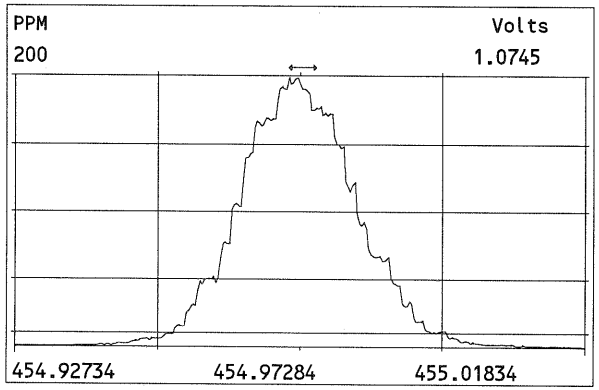




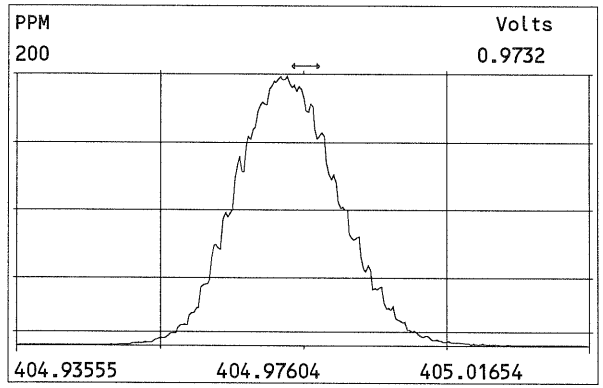


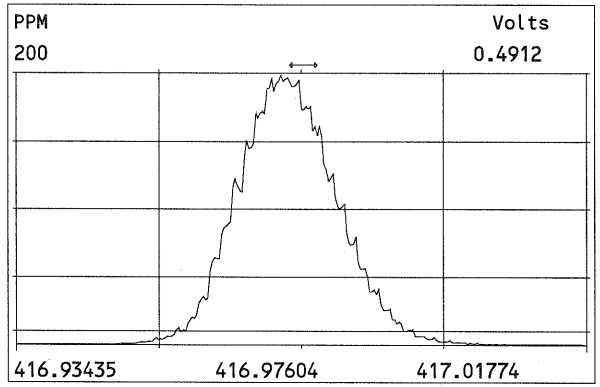


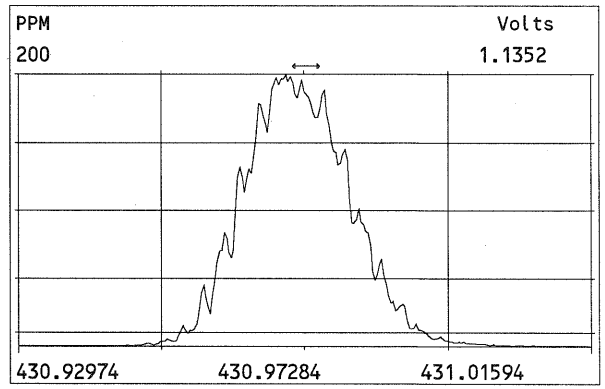


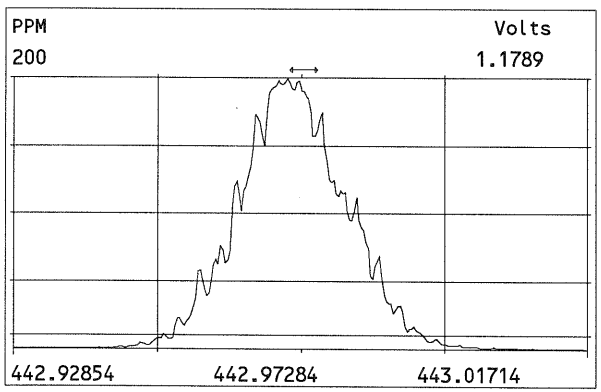


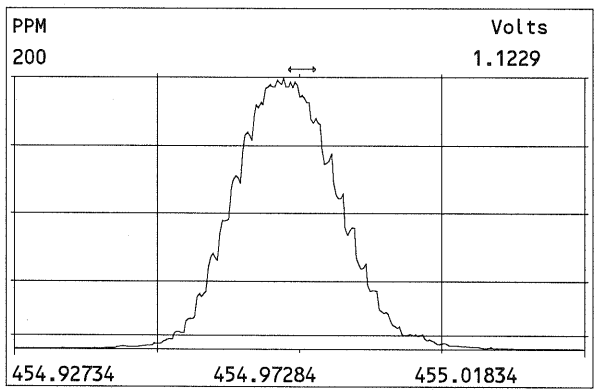
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:4 Reference:PFK

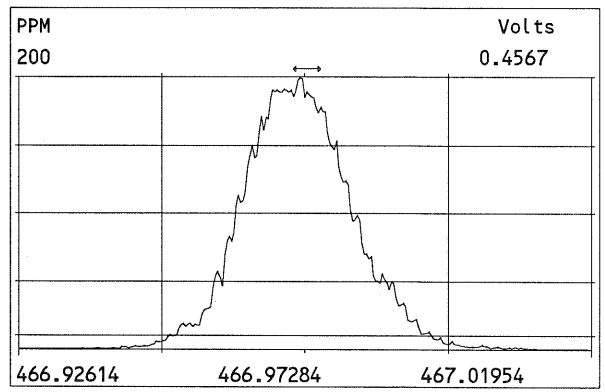


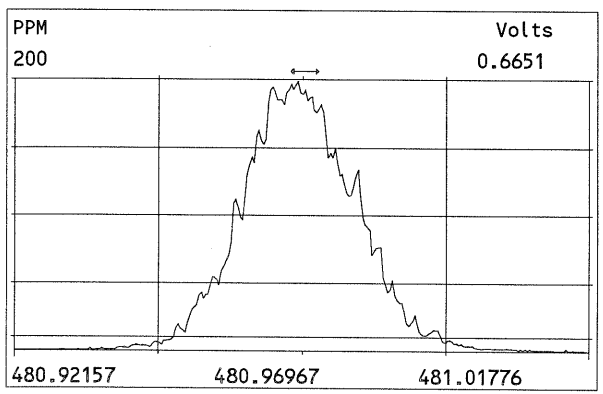




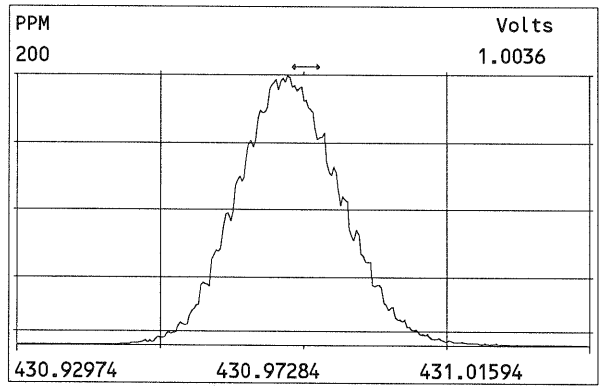


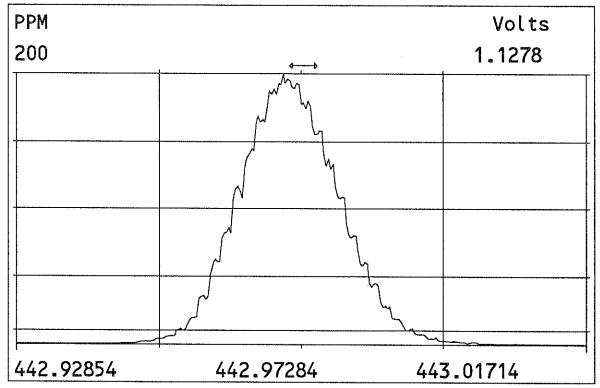


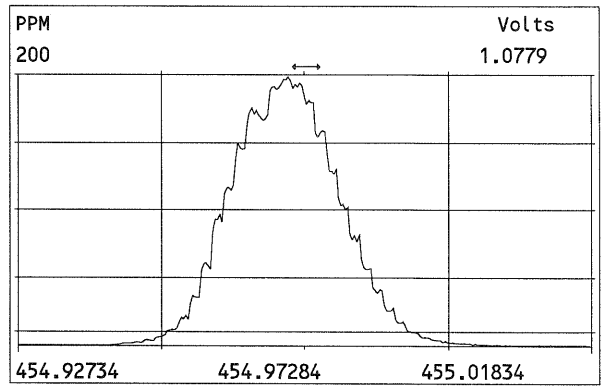


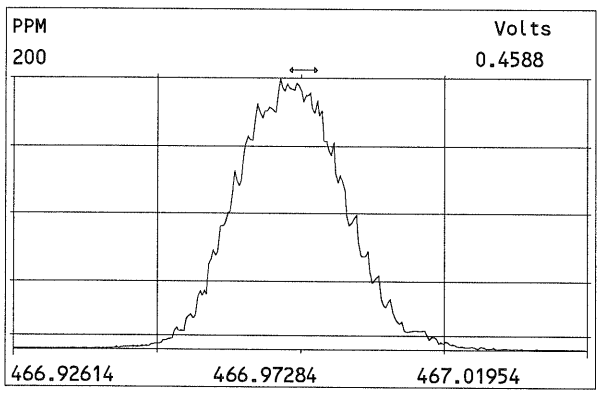


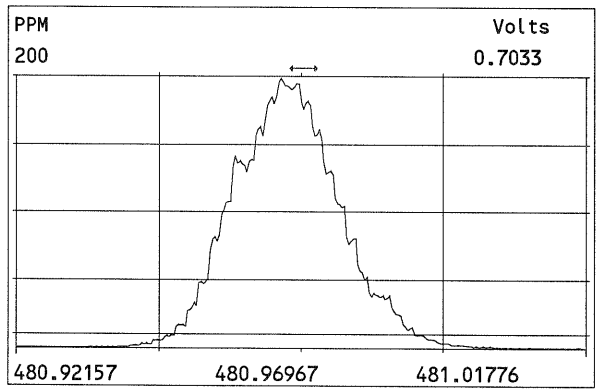
Peak Locate Examination:25-JUL-2006:14:41 File:25JUL06M
Experiment:PCDD Function:5 Reference:PFK

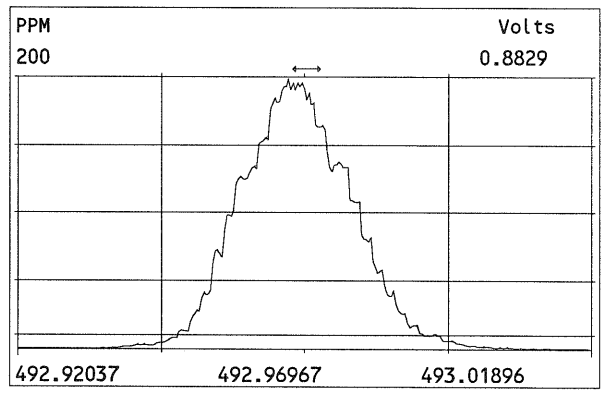


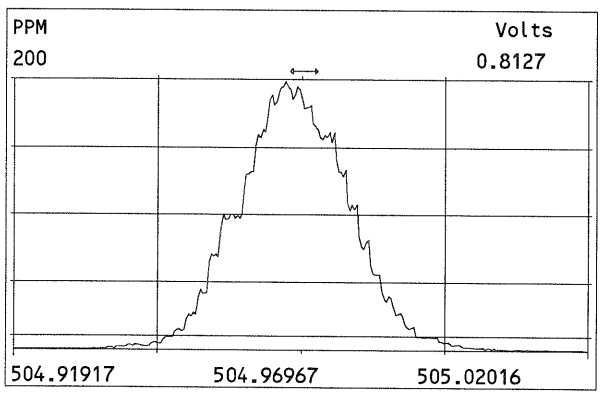


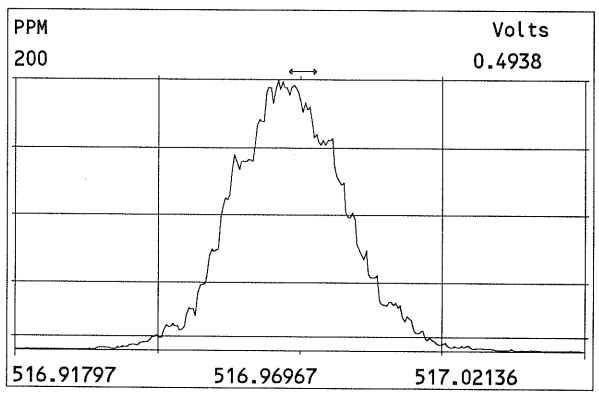




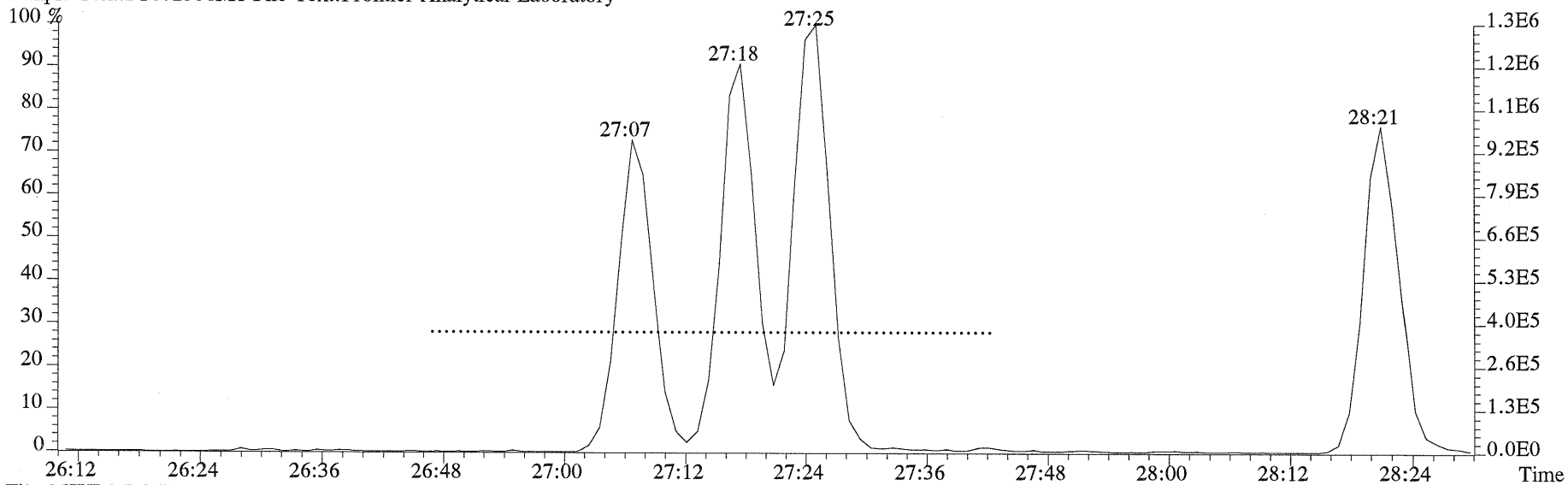








File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST072506M1 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
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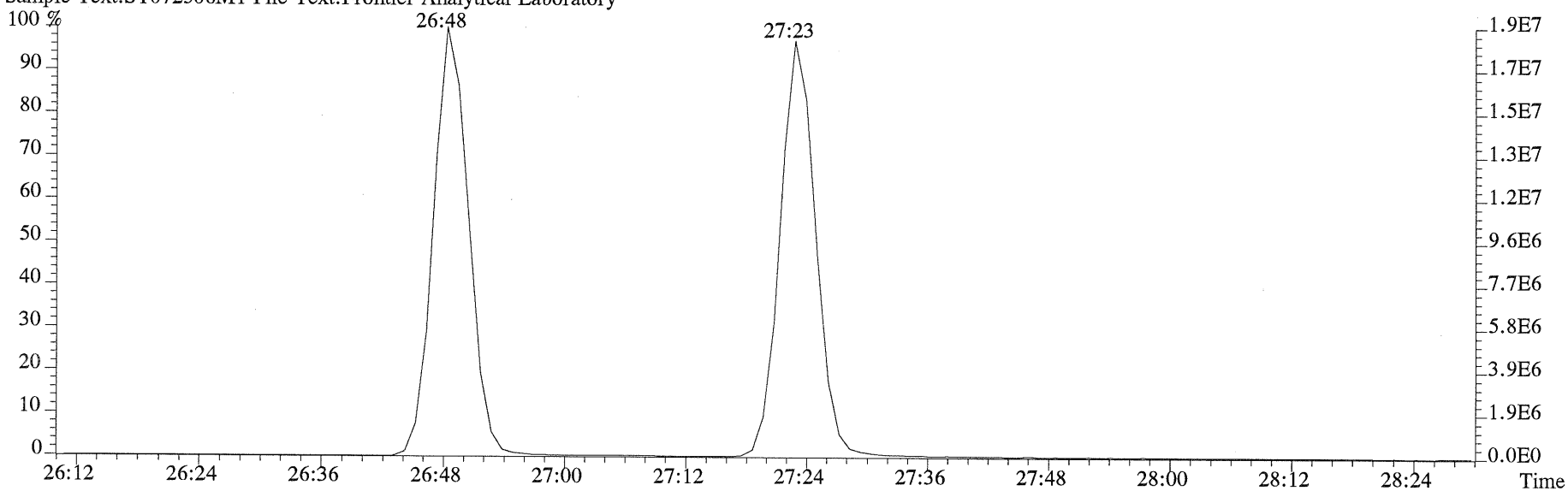

File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
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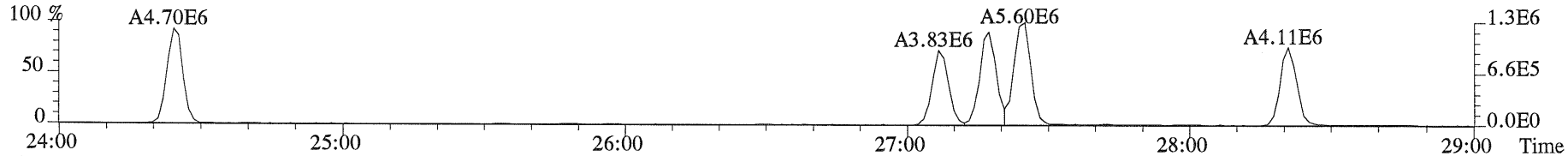

File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
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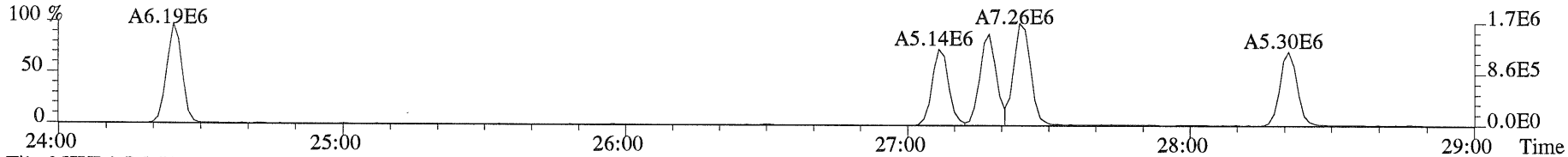

File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
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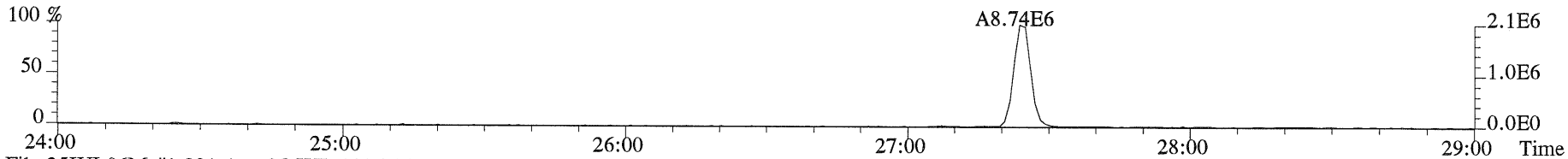

File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
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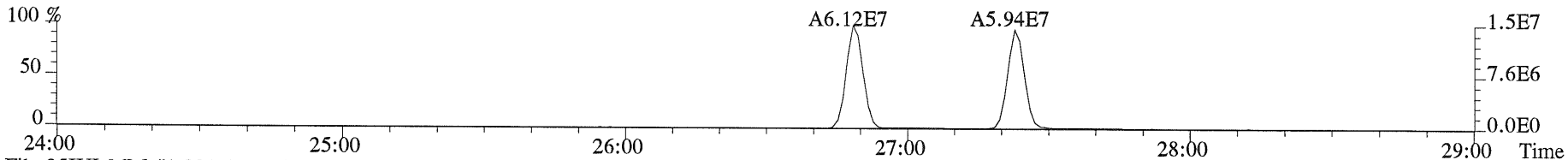
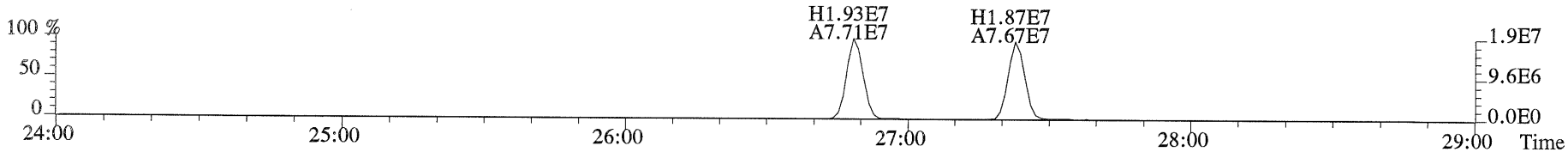
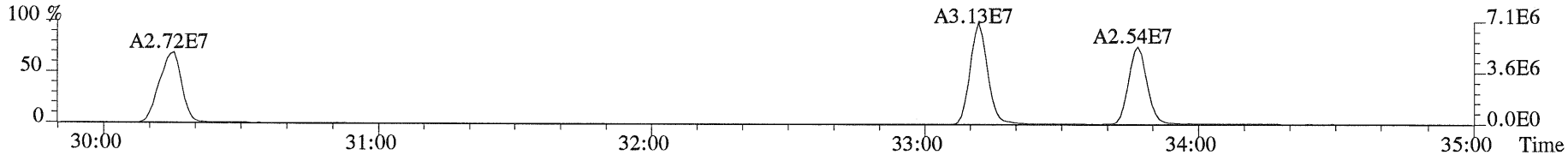


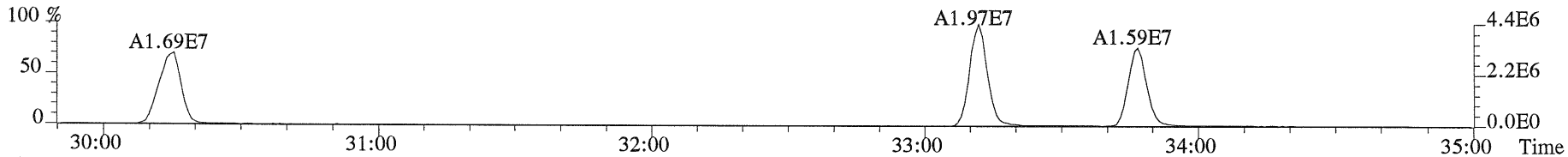
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



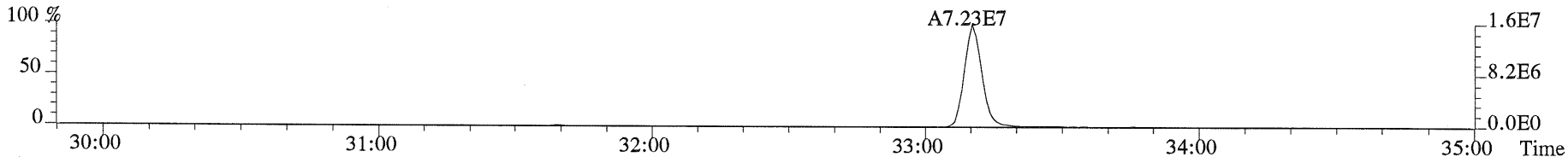
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



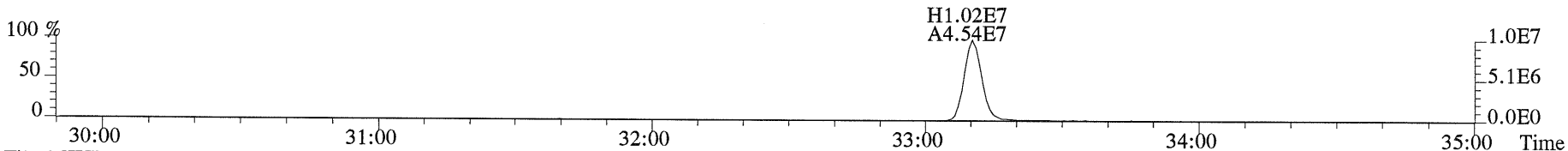
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



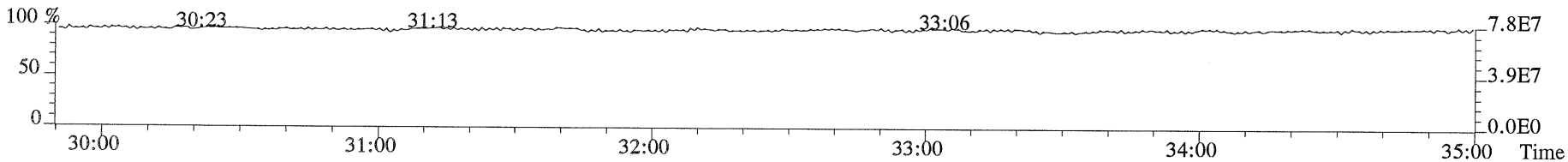
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



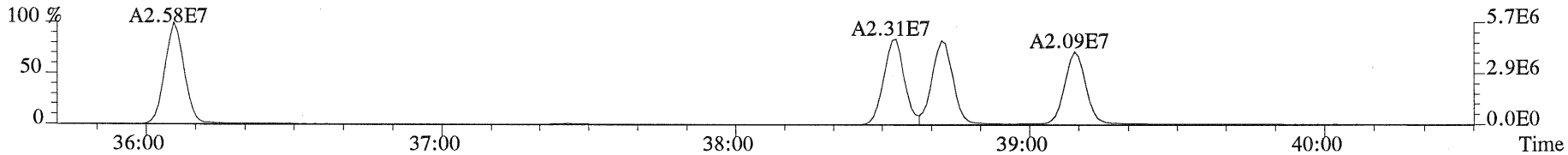
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



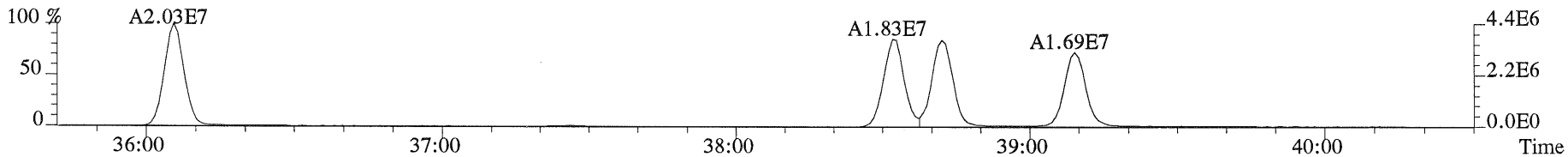
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD



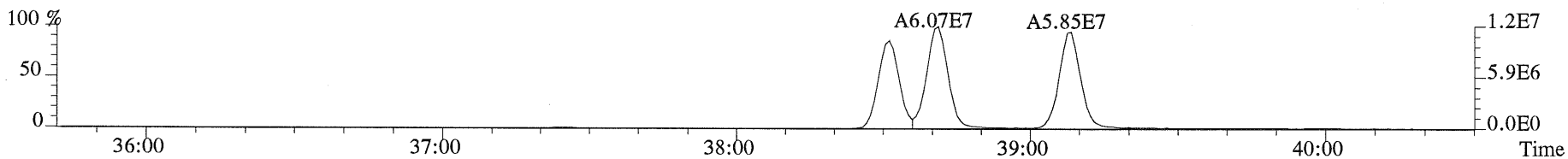
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



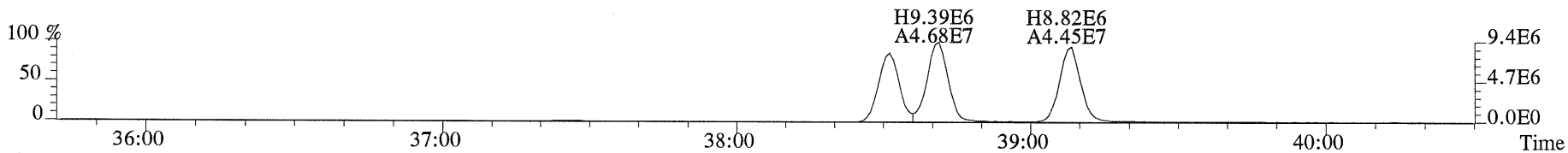
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



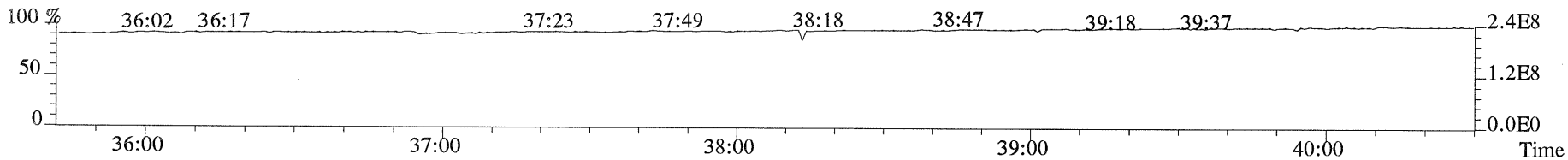
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



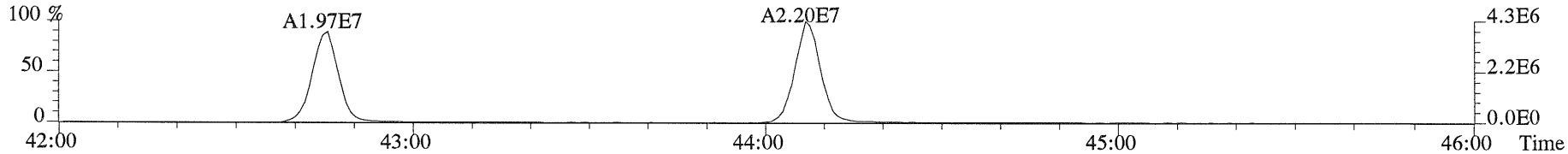
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



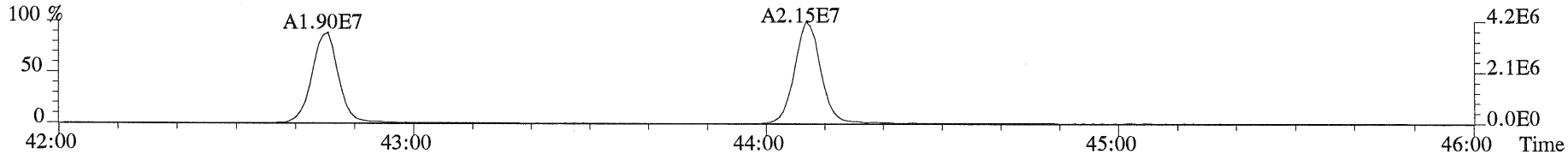
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD



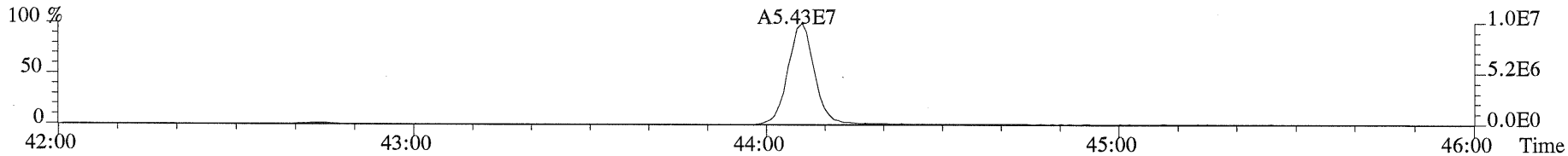
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



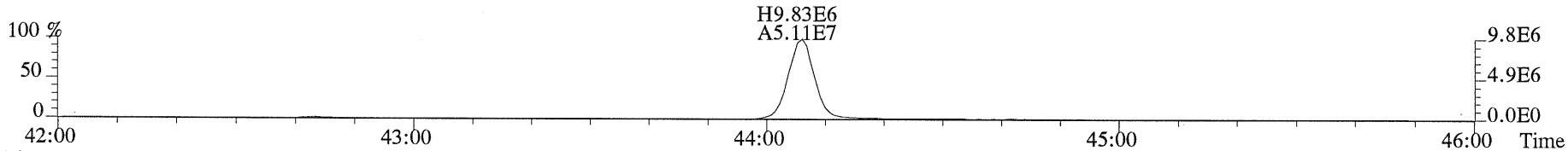
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



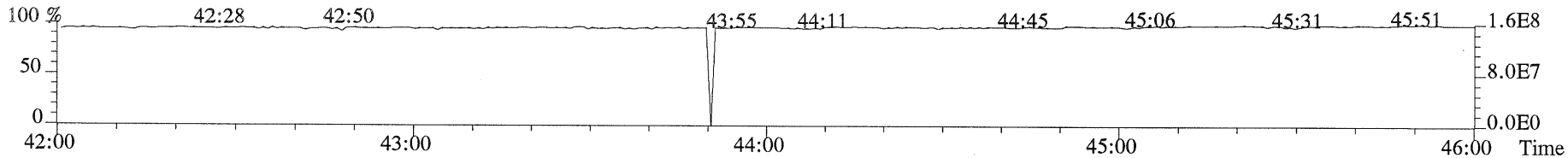
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



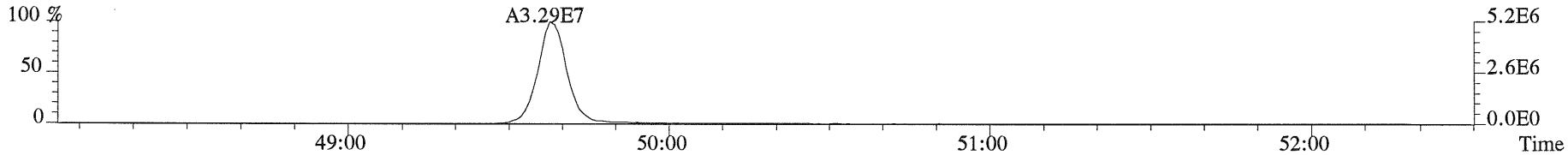
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



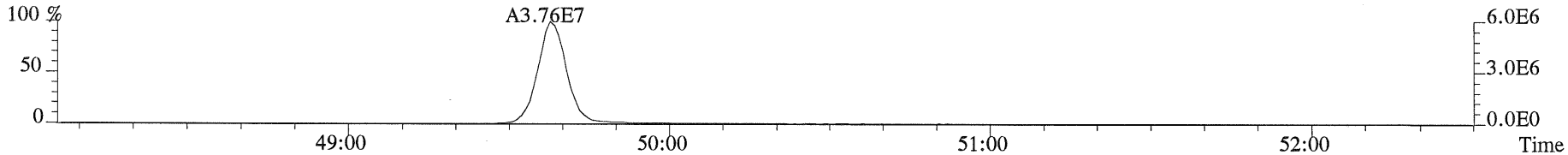
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD



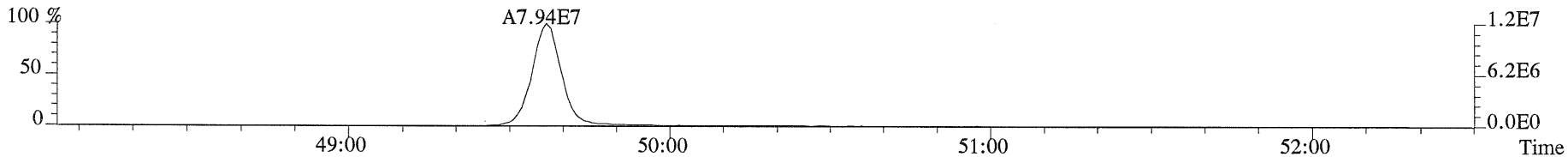
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



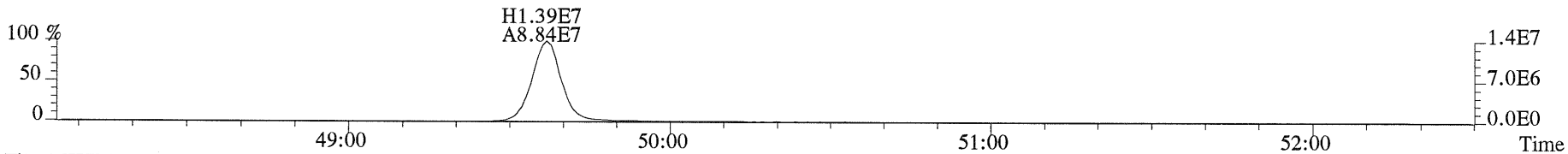
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



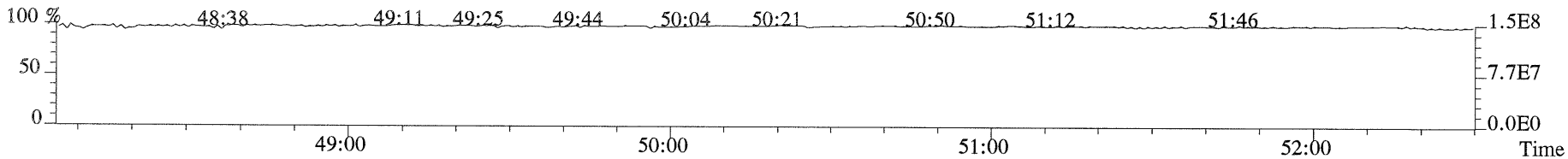
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



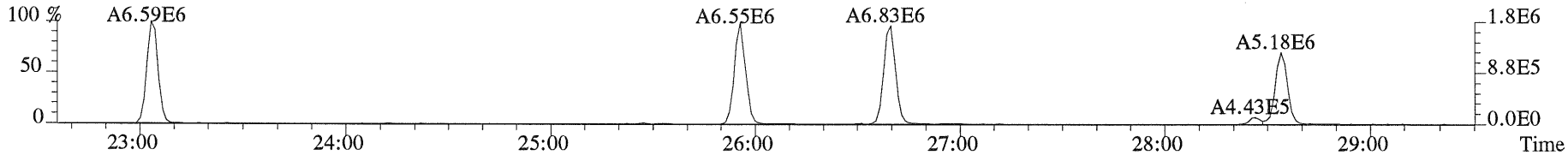
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



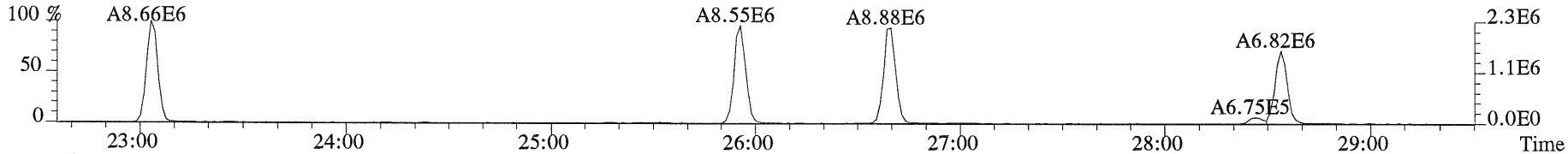
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD



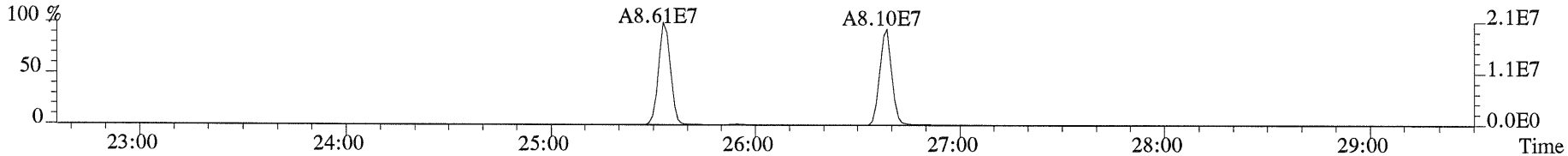
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



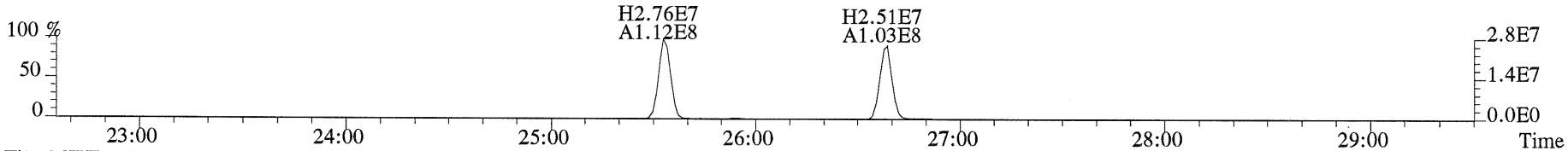
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



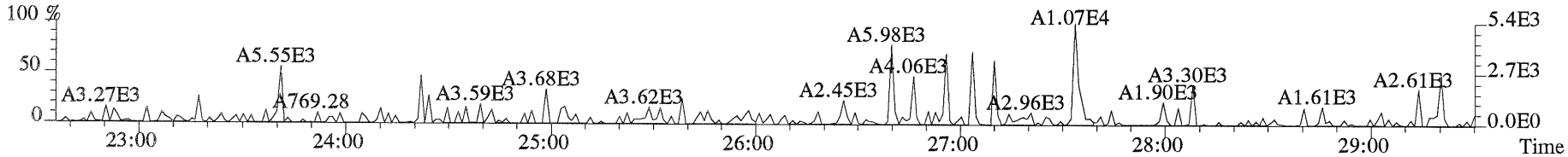
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



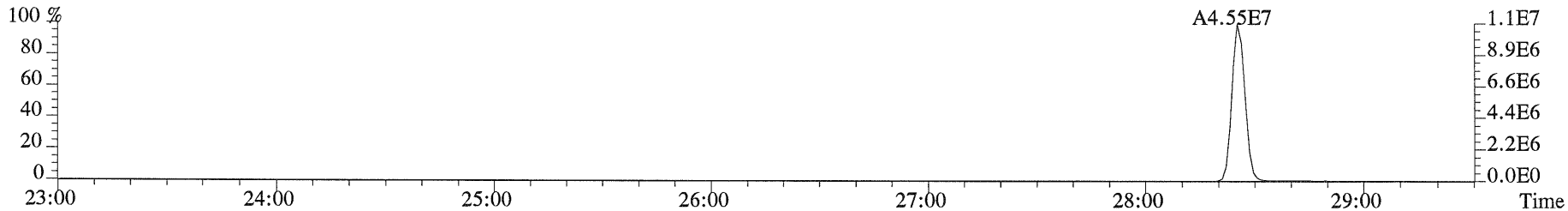
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



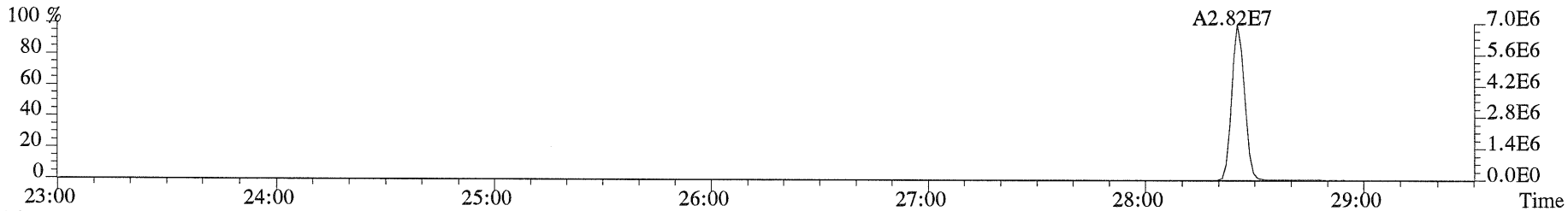
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



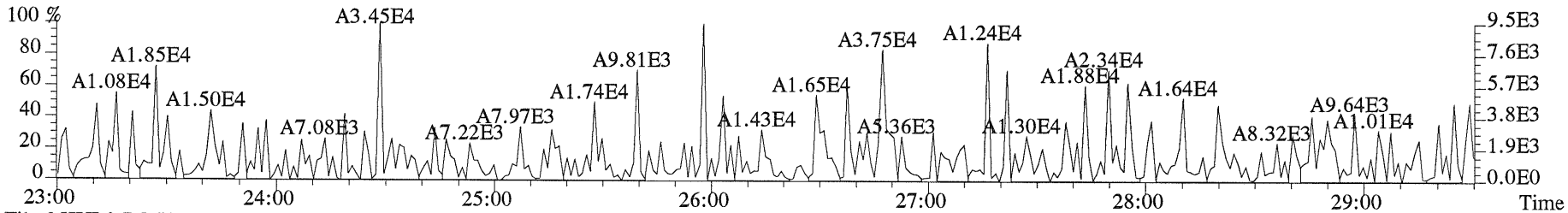
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



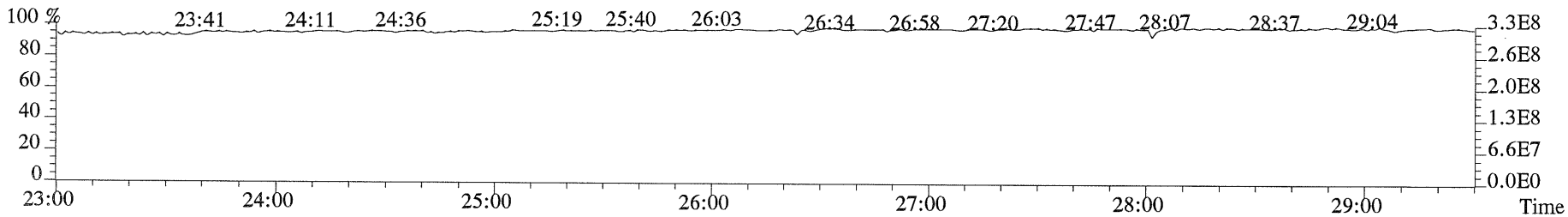
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



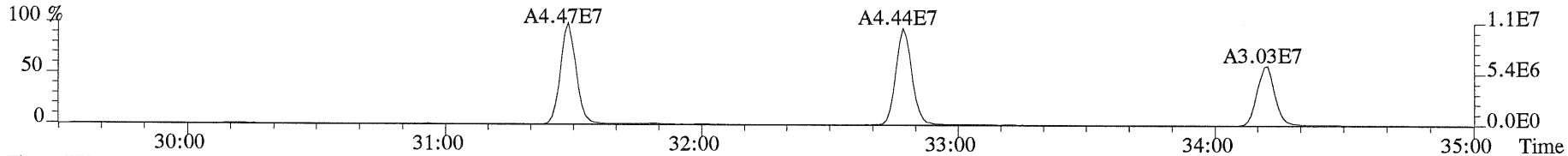
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



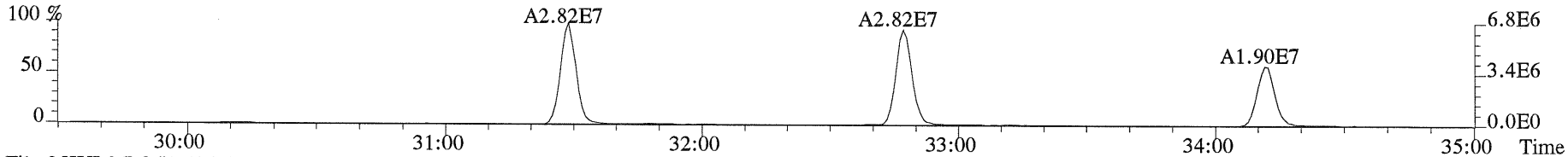
File:25JUL06M #1-391 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD



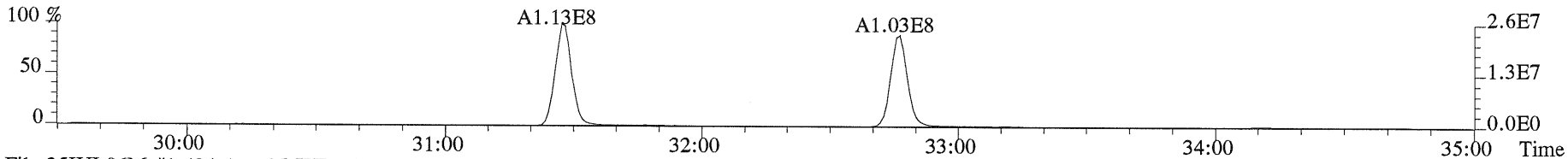
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



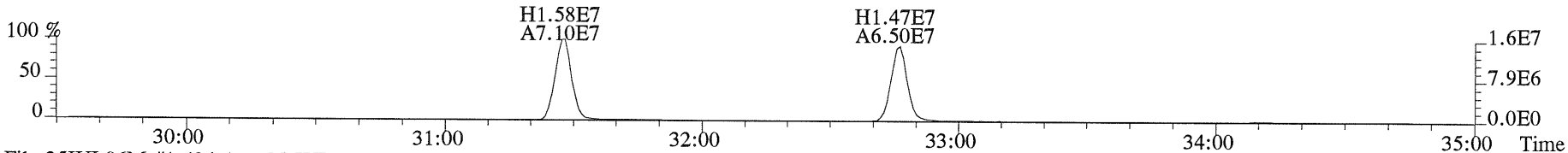
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



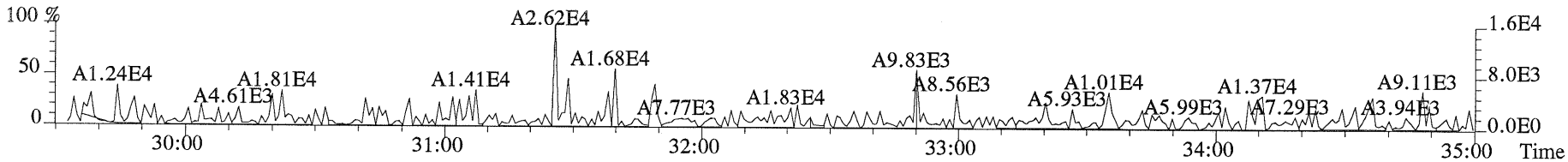
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



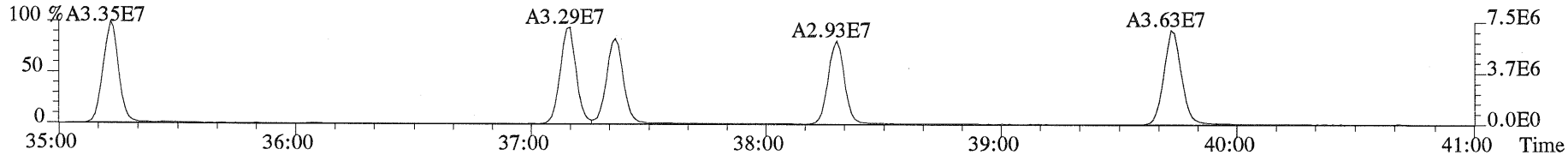
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



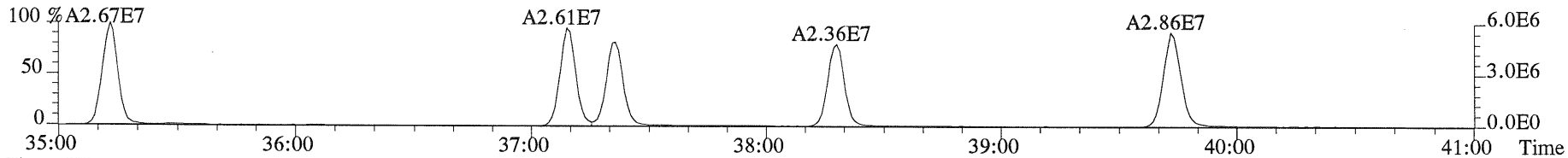
File:25JUL06M #1-424 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



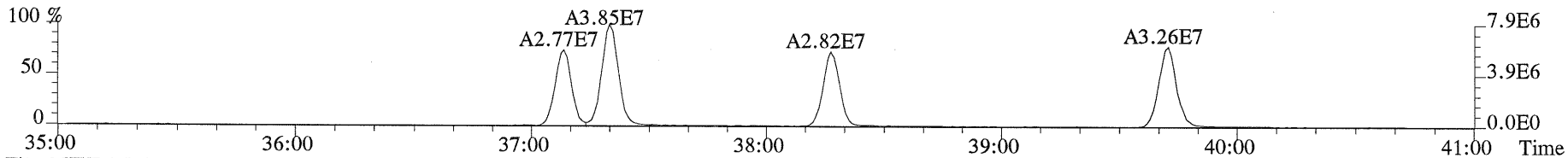
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



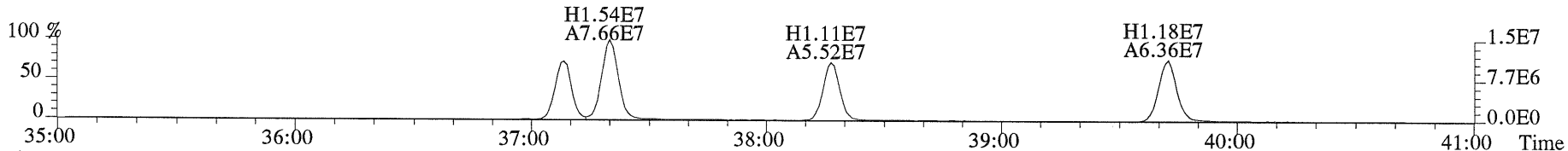
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



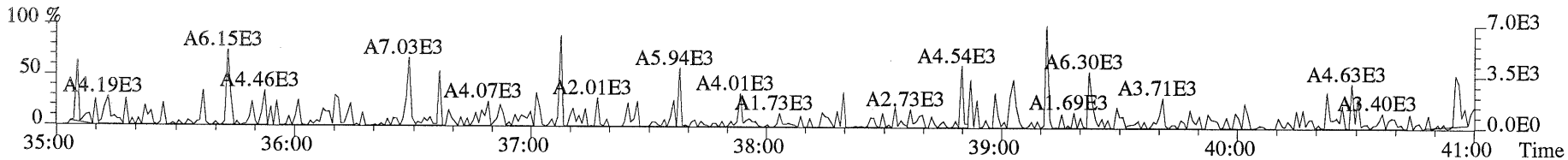
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



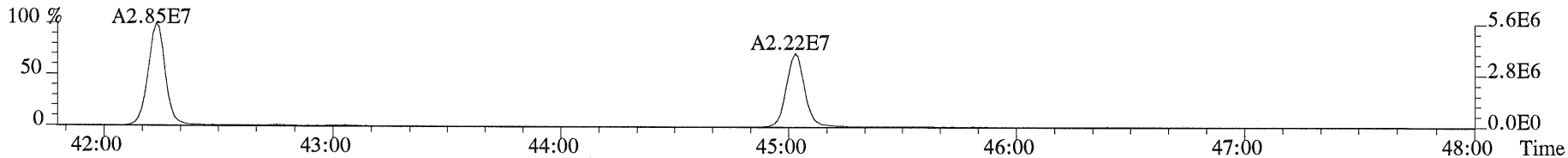
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



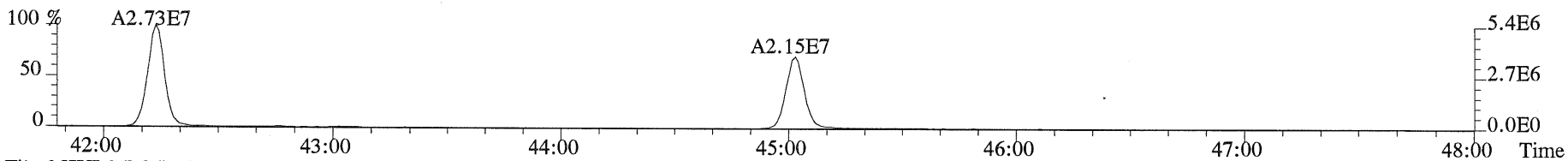
File:25JUL06M #1-464 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



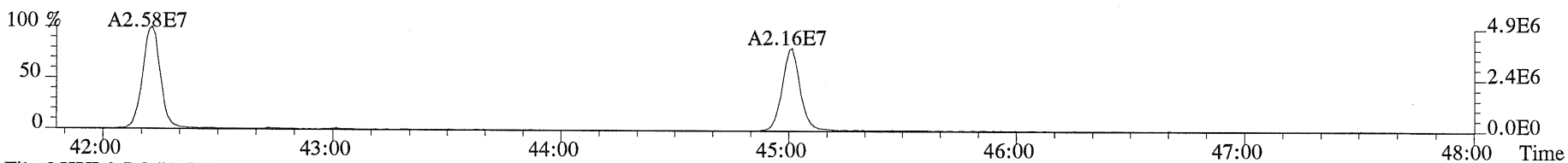
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



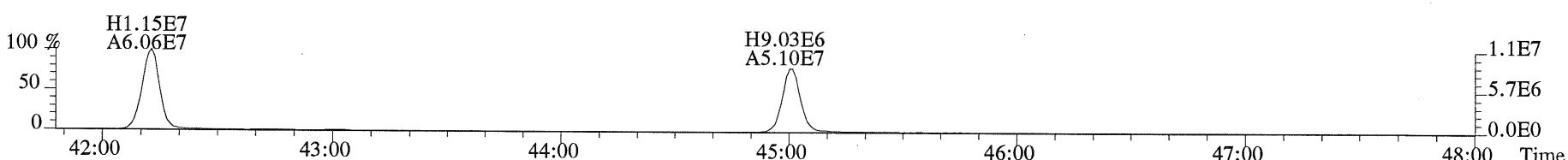
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



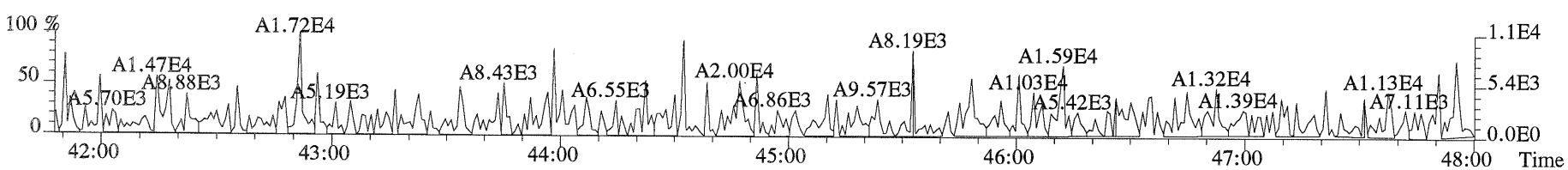
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



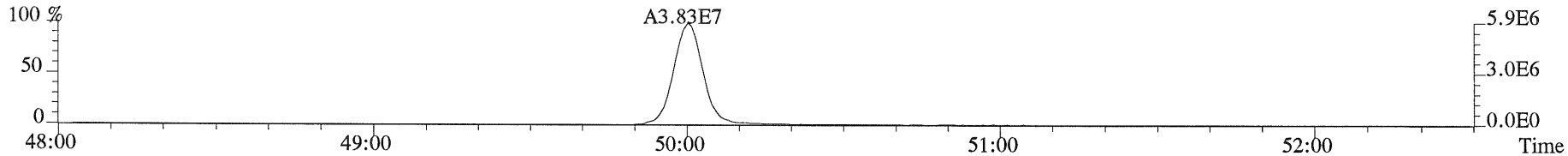
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



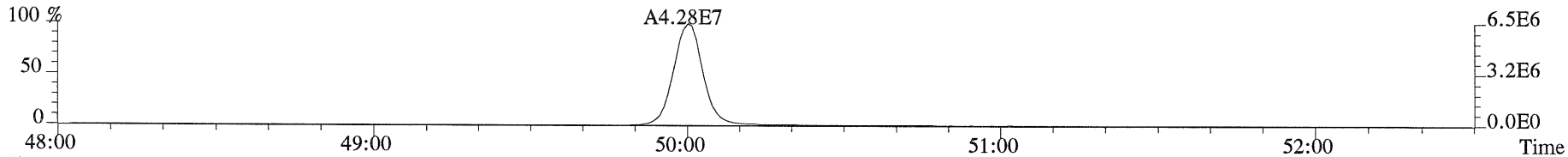
File:25JUL06M #1-541 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



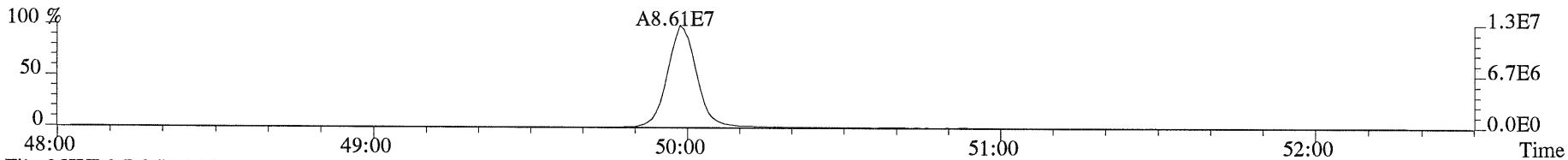
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



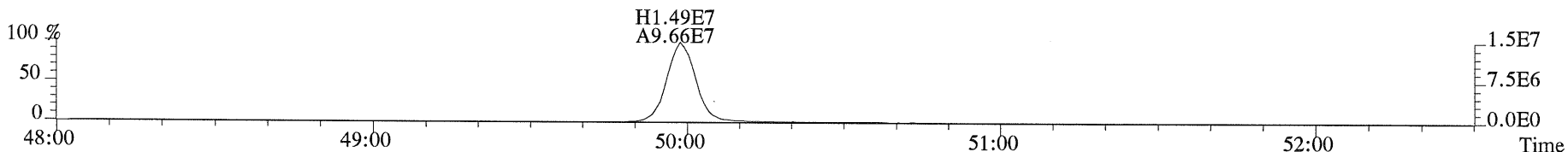
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



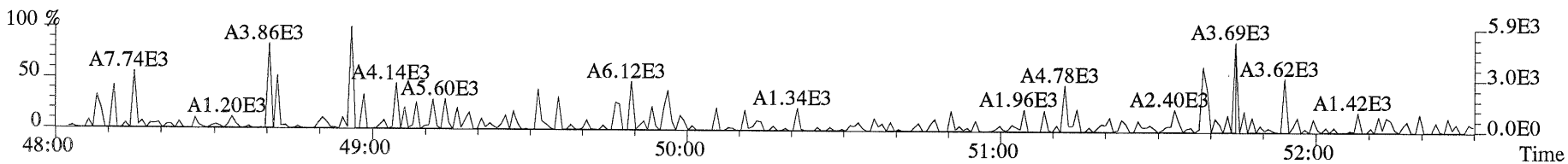
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



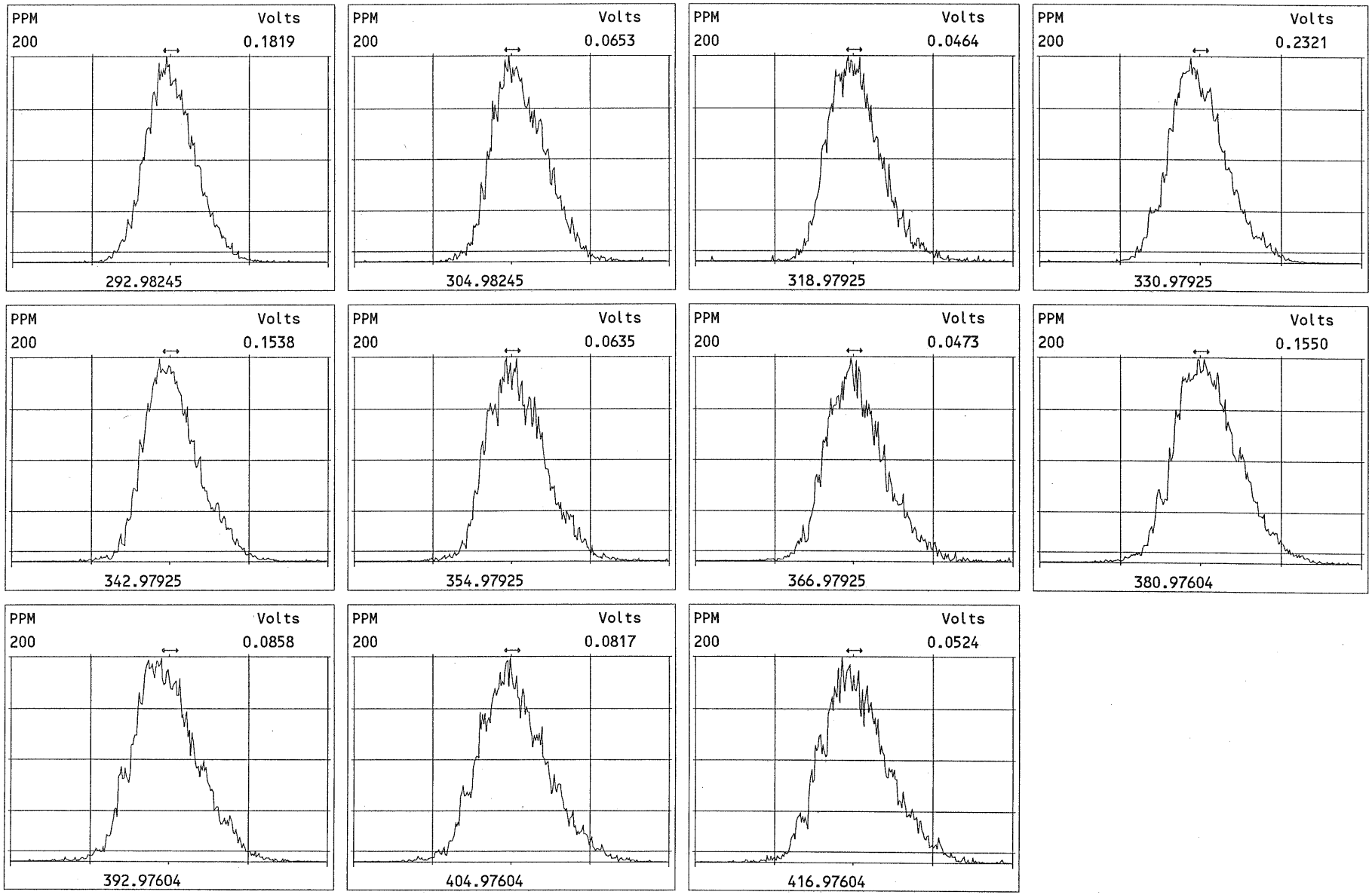
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD



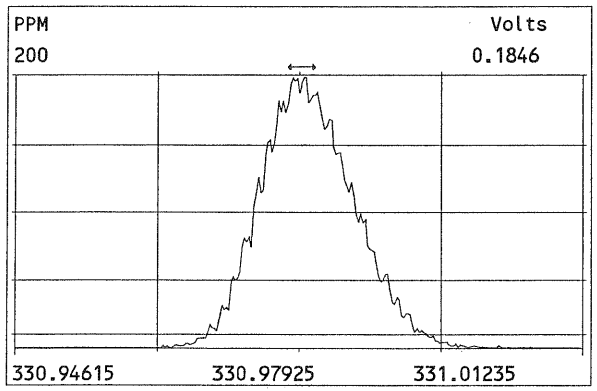
File:25JUL06M #1-347 Acq:25-JUL-2006 14:41:35 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD

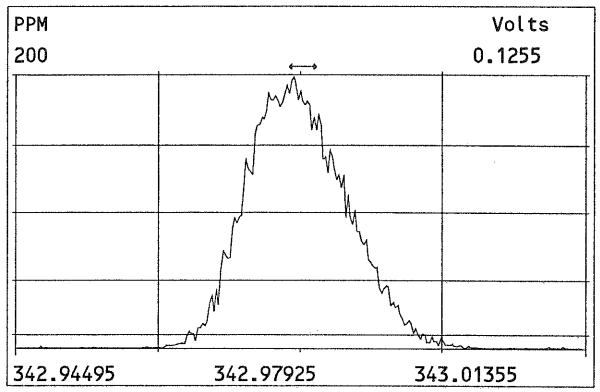


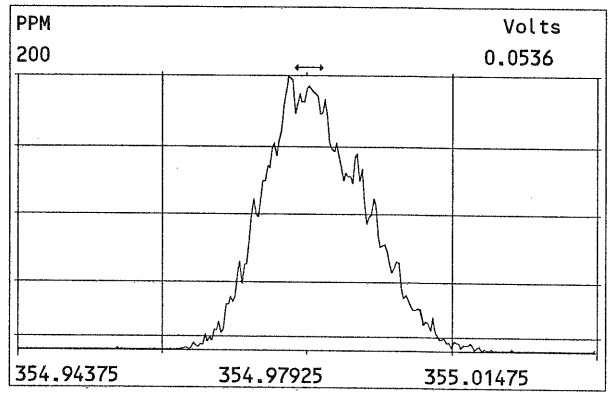
Peak Locate Examination:26-JUL-2006:10:12 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

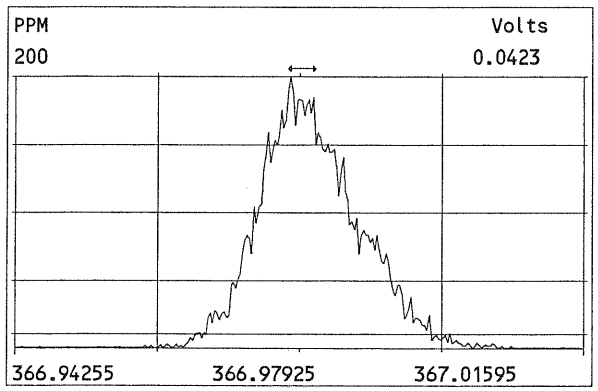


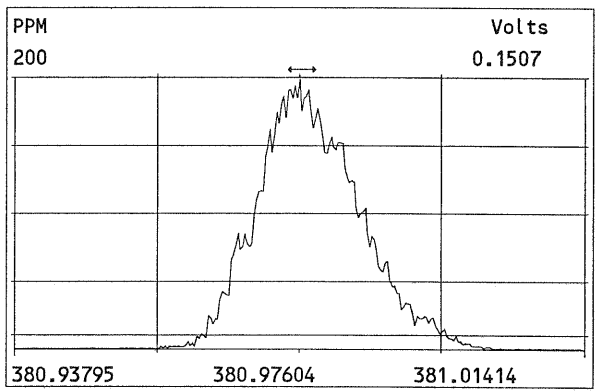
Peak Locate Examination:26-JUL-2006:10:14 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

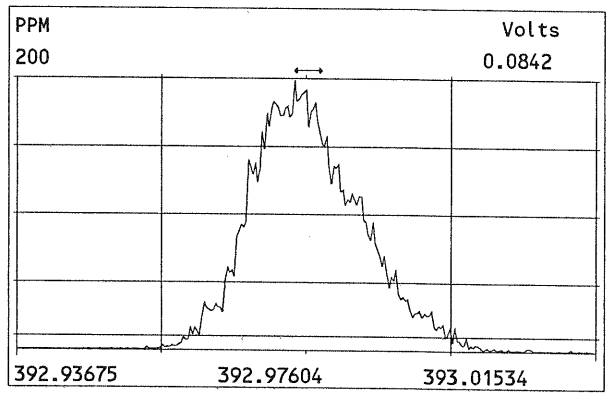


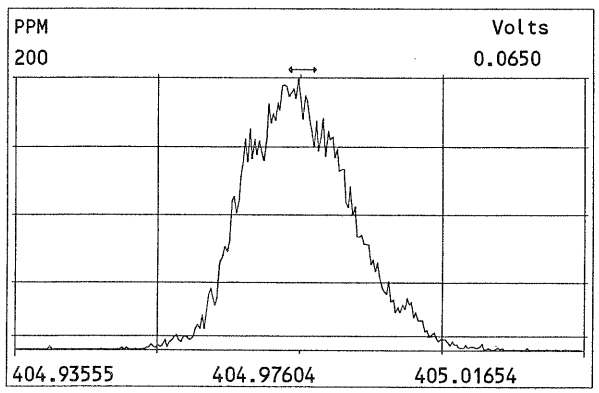


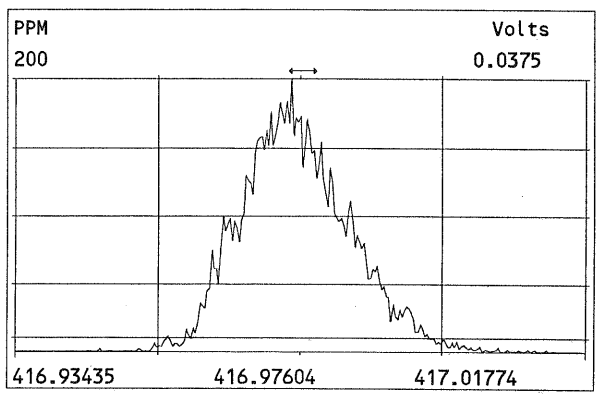




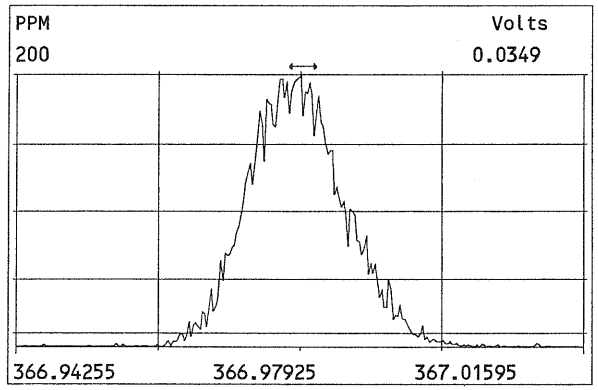


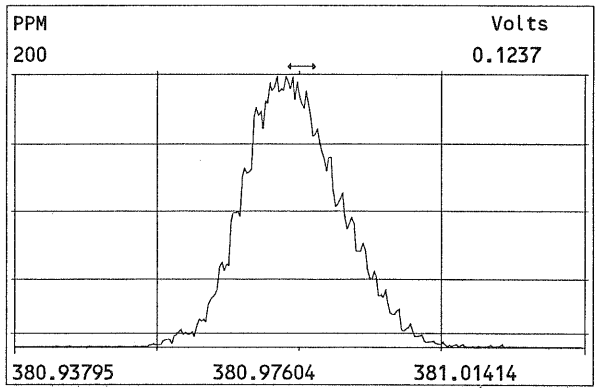


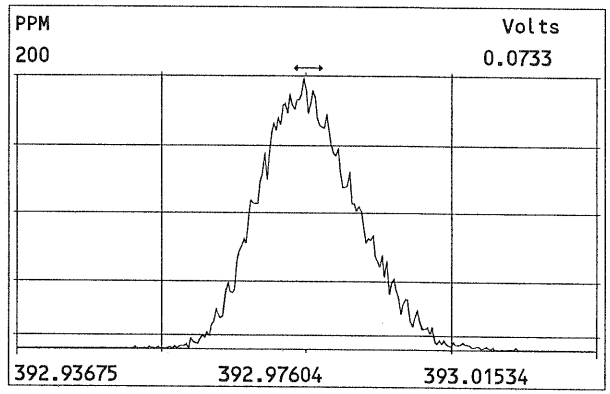


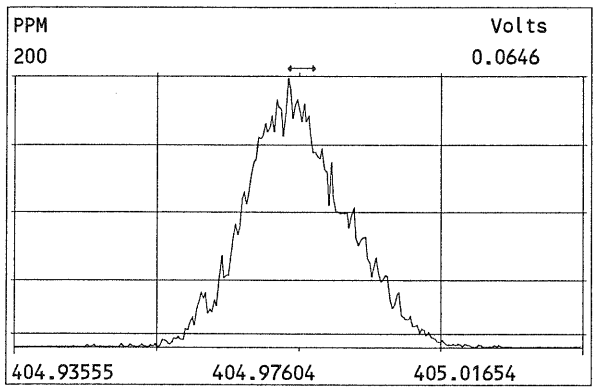


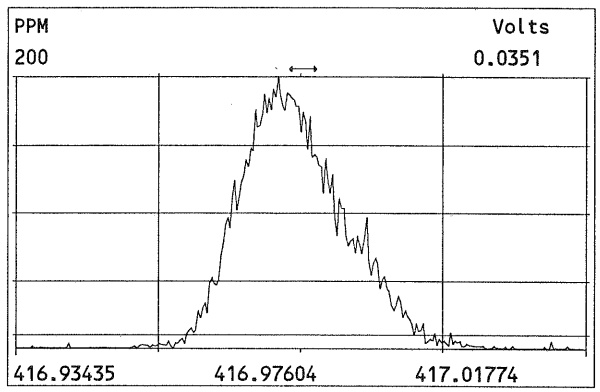
Peak Locate Examination:26-JUL-2006:10:16 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

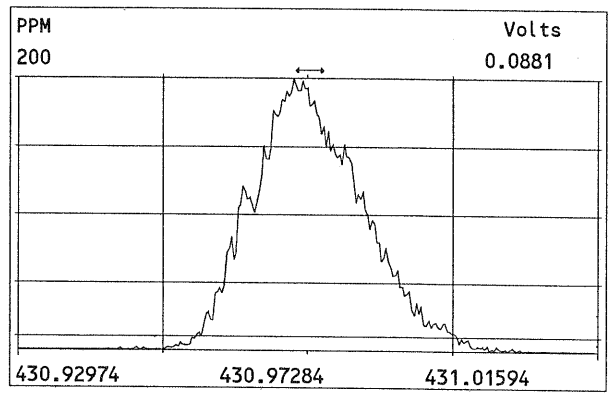


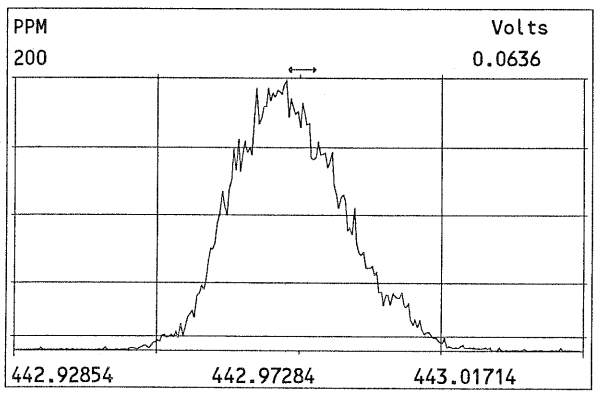


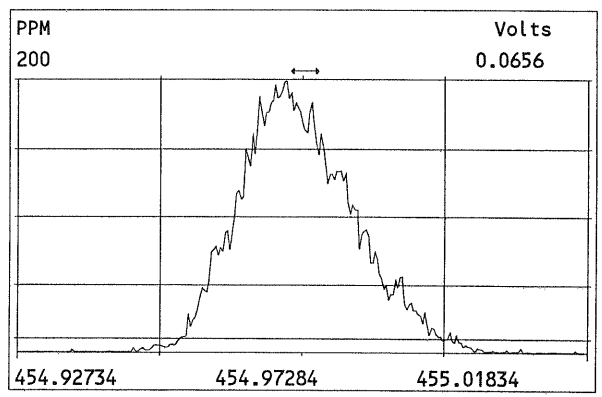












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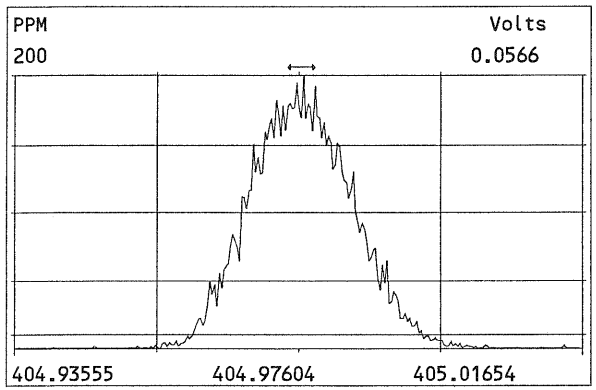
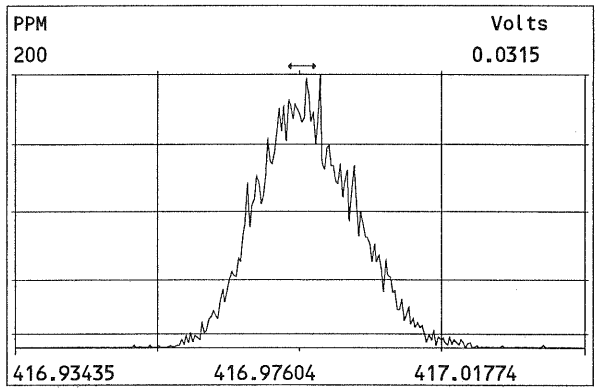
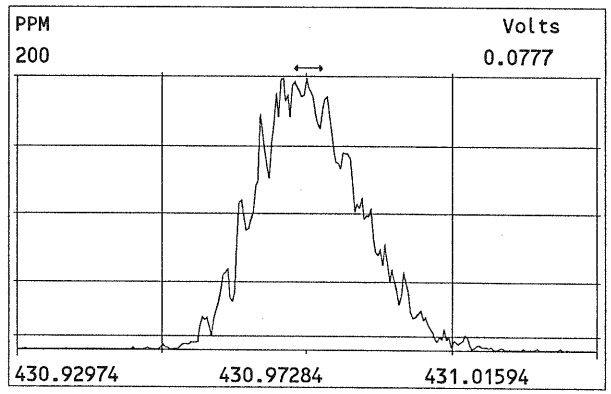
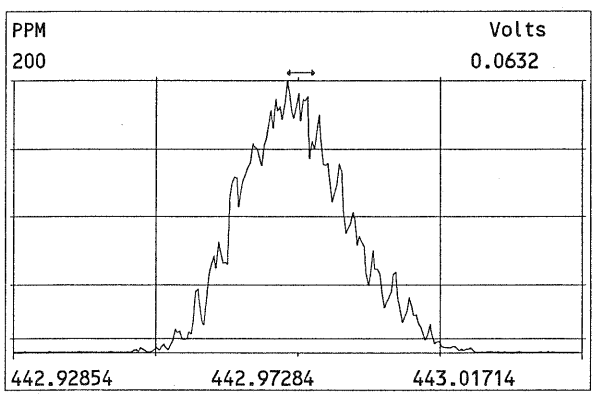
Peak Locate Examination:26-JUL-2006:10:18 File:25JUL06M_RES_CHECK

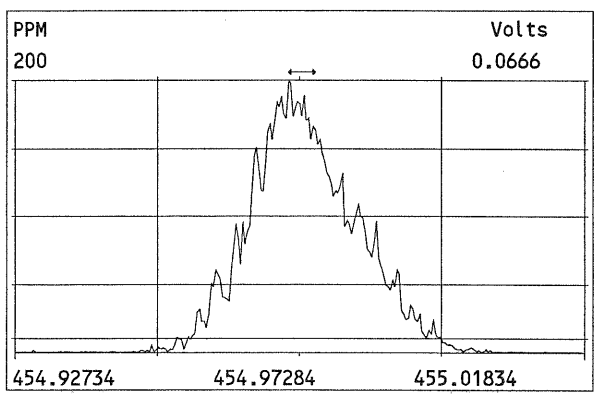
Experiment:PCDD Function:4 Reference:PFK

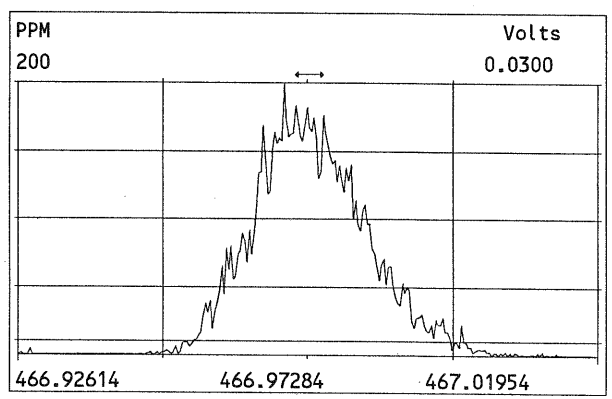


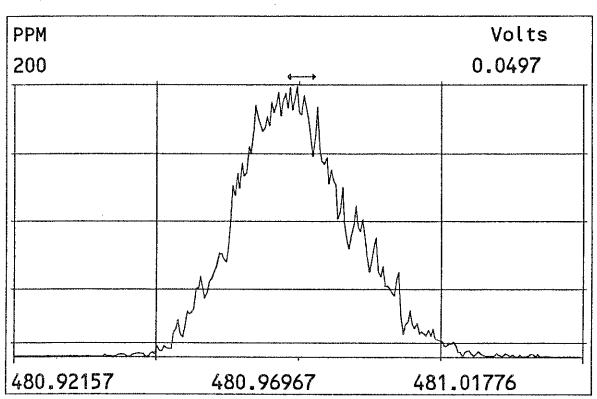




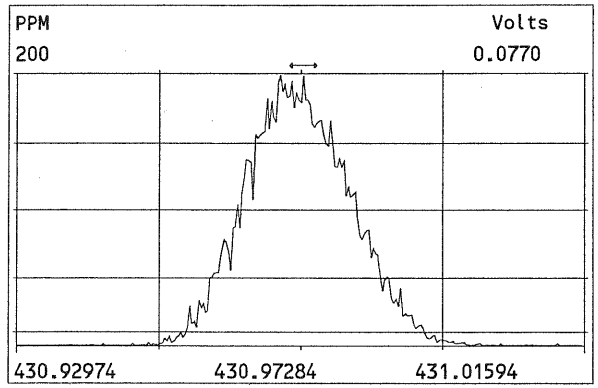


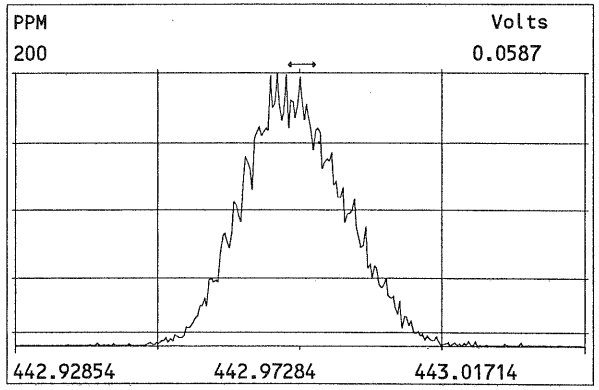


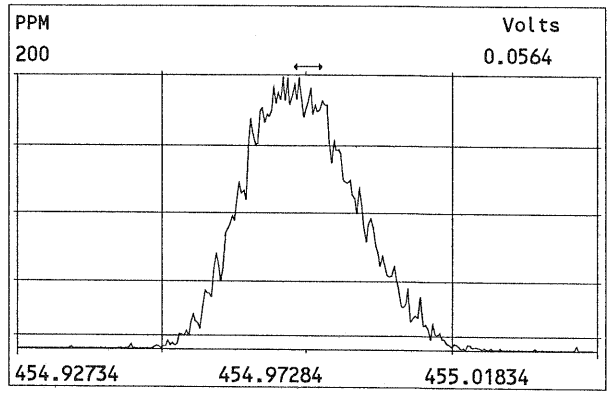


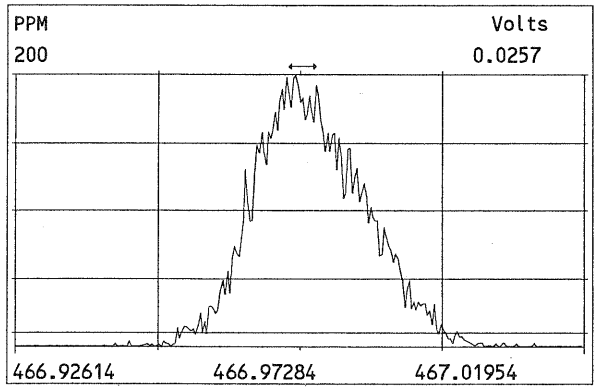


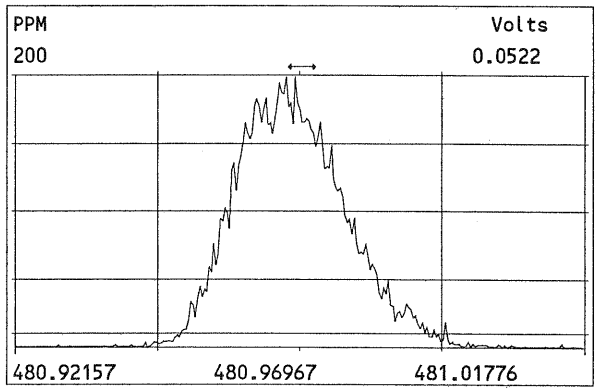
Peak Locate Examination:26-JUL-2006:10:20 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

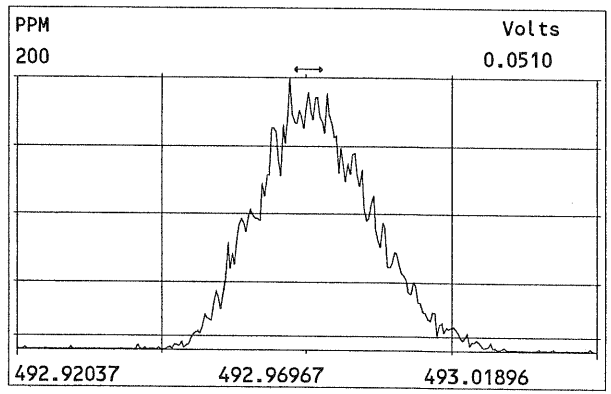


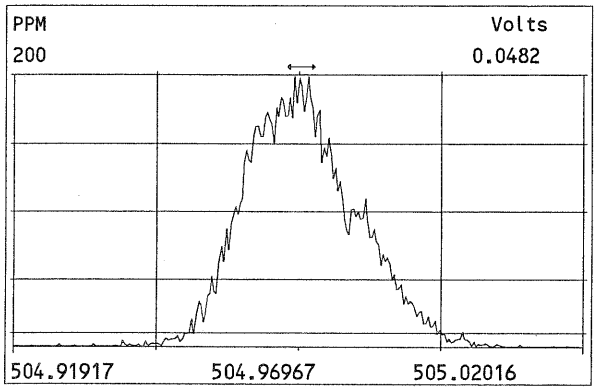


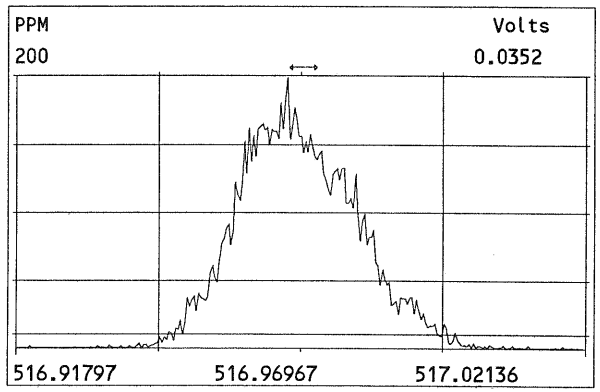












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 23:07:06

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	9.16	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	47.4	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	49.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	52.3	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	50.6	43.0 - 58.0
OCDD	M+2/M+4	0.91	0.76-1.02	y	100	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	8.96	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.3	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	47.8	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.1	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.1	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	50.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.2	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	53.1	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.1	43.0 - 58.0
OCDF	M+2/M+4	0.92	0.76-1.02	y	103	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 23:07:06

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	101	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32-1.78	y	89.5	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	95.4	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	95.4	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	110	72.0 - 138
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	228	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	101	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	92.0	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	89.3	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.5	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	90.6	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	92.0	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	96.6	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	101	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	111	77.0 - 129
13C-OCDF	M+2/M+4	0.90	0.76-1.02	y	223	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.60	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/26/06

FORM 5
PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 Time: 23:07:06

DB-5 IS Data Filename: 25JUL06M Sam:10 Analysis Date: 25-JUL-06 Time: 23:07:06

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:25	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:14	1,3,4,6,8-PeCDF (F)	28:25
1,2,3,8,9-PeCDD (L)	33:46	1,2,3,8,9-PeCDF (L)	34:12
1,2,4,6,7,9-HxCDD (F)	36:06	1,2,3,4,6,8-HxCDF (F)	35:13
1,2,3,7,8,9-HxCDD (L)	39:10	1,2,3,7,8,9-HxCDF (L)	39:44
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:14
1,2,3,4,6,7,8-HpCDD (L)	44:08	1,2,3,4,7,8,9-HpCDF (L)	45:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)
<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 23:07:06 CS3 or VER Data Filename: 25JUL06M Sam:10

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.237	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.223	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 25-JUL-06 23:07:06 CS3 or VER Data Filename: 25JUL06M Sam:10

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.000	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.000	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 7/26/06

FAL ID: ST072506M2 Filename: 25JUL06M Sam:10 Acquired: 25-JUL-06 23:07:06 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072506M1 EndCal: ST072506M2
Results: 3969-2X GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.1
WHO 1998 Tox: 121

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.37e+07	0.76 y	27:25	1.10	9.16		2.50	-	*	
1,2,3,7,8-PeCDD	4.95e+07	1.56 y	33:12	0.90	47.4		2.50	-	*	
1,2,3,4,7,8-HxCDD	3.60e+07	1.25 y	38:33	0.96	49.9		2.50	-	*	
1,2,3,6,7,8-HxCDD	3.72e+07	1.24 y	38:42	0.83	49.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.36e+07	1.23 y	39:10	0.77	52.3		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	4.00e+07	1.04 y	44:08	0.86	50.6		2.50	-	*	
OCDD	6.18e+07	0.91 y	49:40	0.87	100		2.50	-	*	
2,3,7,8-TCDF	1.56e+07	0.76 y	26:40	0.99	8.96		2.50	-	*	
1,2,3,7,8-PeCDF	6.56e+07	1.56 y	31:29	0.80	48.3		2.50	-	*	
2,3,4,7,8-PeCDF	6.50e+07	1.56 y	32:47	0.88	47.8		2.50	-	*	
1,2,3,4,7,8-HxCDF	4.95e+07	1.25 y	37:09	1.42	50.1		2.50	-	*	
1,2,3,6,7,8-HxCDF	4.72e+07	1.24 y	37:22	0.97	50.1		2.50	-	*	
2,3,4,6,7,8-HxCDF	4.50e+07	1.23 y	38:18	1.26	50.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	5.56e+07	1.25 y	39:44	1.34	50.2		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.18e+07	1.04 y	42:14	1.28	53.1		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.28e+07	1.04 y	45:03	1.22	52.1		2.50	-	*	
OCDF	7.39e+07	0.92 y	50:02	0.90	103		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.36e+08	0.79 y	27:23	1.00	101					101
13C-1,2,3,7,8-PeCDD	1.16e+08	1.57 y	33:10	0.96	89.5					89.5
13C-1,2,3,4,7,8-HxCDD	7.53e+07	1.26 y	38:32	0.90	95.4					95.4
13C-1,2,3,6,7,8-HxCDD	9.05e+07	1.27 y	38:42	1.09	95.4					95.4
13C-1,2,3,4,6,7,8-HpCDD	9.20e+07	1.04 y	44:06	0.96	110					110
13C-OCDD	1.42e+08	0.90 y	49:39	0.71	228					114
13C-2,3,7,8-TCDF	1.75e+08	0.78 y	26:38	0.94	101					101
13C-1,2,3,7,8-PeCDF	1.70e+08	1.57 y	31:28	1.00	92.0					92.0
13C-2,3,4,7,8-PeCDF	1.55e+08	1.56 y	32:46	0.94	89.3					89.3
13C-1,2,3,4,7,8-HxCDF	6.95e+07	0.51 y	37:09	0.86	92.5					92.5
13C-1,2,3,6,7,8-HxCDF	9.72e+07	0.51 y	37:20	1.23	90.6					90.6
13C-2,3,4,6,7,8-HxCDF	7.10e+07	0.51 y	38:17	0.88	92.0					92.0
13C-1,2,3,7,8,9-HxCDF	8.29e+07	0.51 y	39:43	0.98	96.6					96.6
13C-1,2,3,4,6,7,8-HpCDF	7.61e+07	0.45 y	42:13	0.86	101					101
13C-1,2,3,4,7,8,9-HpCDF	6.75e+07	0.44 y	45:01	0.70	111					111
13C-OCDF	1.59e+08	0.90 y	50:00	0.82	223					111
37Cl-2,3,7,8-TCDD	9.42e+06		27:25	0.81	8.60					86.0
13C-1,2,3,4-TCDD	1.35e+08	0.80 y	26:48	-	70.7					
13C-1,2,3,4-TCDF	1.84e+08	0.77 y	25:34	-	64.1					
13C-1,2,3,7,8,9-HxCDD	8.74e+07	1.29 y	39:09	-	58.5					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.69e+07		23:02	1.10	38.0		2.50	-	*	19
Total Penta-Dioxins	1.33e+08		30:14	0.90	127		2.50	-	*	13
Total Hexa-Dioxins	1.48e+08		36:06	0.85	211		2.50	-	*	26
Total Hepta-Dioxins	7.58e+07		42:46	0.86	95.7		2.50	-	*	21
Total Tetra-Furans	5.96e+07		23:04	0.99	34.3		2.50	-	*	21
1st Fn. Tot Penta-Furans	7.41e+07		28:25	0.84	54.5		2.50	-	*	1 PeCDF
Total Penta-Furans	1.78e+08		30:11	0.84	131		2.50	-	*	15 186
Total Hexa-Furans	2.50e+08		35:13	1.22	254		2.50	-	*	14
Total Hepta-Furans	9.69e+07		42:14	1.25	108		2.50	-	*	23

Analyst: _____ Date: 7/26/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:25JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

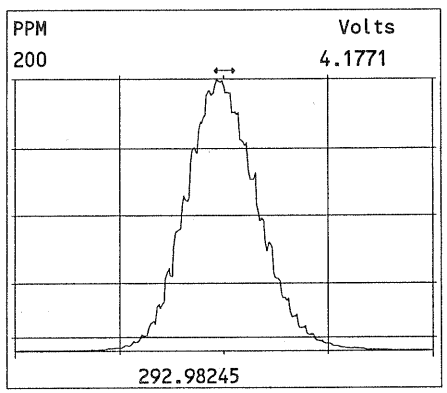
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
25JUL06M	1	ST072506M1	1613 CS3 (051212J)	25-JUL-06 14:41:35	ST072506M1	ST072506M2	DV
25JUL06M	2	3969-006-0001-SA	E2-B4-EP162-182	25-JUL-06 15:44:16	ST072506M1	ST072506M2	DV
25JUL06M	3	3969-009-0001-SA	E1-B1-EP85-164	25-JUL-06 16:39:41	ST072506M1	ST072506M2	DV
25JUL06M	4	SB072506M1	Solvent Blank	25-JUL-06 17:35:04	ST072506M1	ST072506M2	DV
25JUL06M	5	0913-001-0001-OPR	OPR	25-JUL-06 18:30:25	ST072506M1	ST072506M2	DV
25JUL06M	6	0913-001-0001-MB	Method Blank	25-JUL-06 19:25:45	ST072506M1	ST072506M2	DV
25JUL06M	7	3969-004-X002-SA	E8-162-T-C7@15	25-JUL-06 20:21:04	ST072506M1	ST072506M2	DV
25JUL06M	8	3969-002-X002-SA	E3-A4-EP168-181	25-JUL-06 21:16:24	ST072506M1	ST072506M2	DV
25JUL06M	9	SB072506M2	Solvent Blank	25-JUL-06 22:11:47	ST072506M1	ST072506M2	DV
25JUL06M	10	ST072506M2	1613 CS3 (051212J)	25-JUL-06 23:07:06	ST072506M1	ST072506M2	DV
25JUL06M	11	3956-001-0001-SA	IG7-S1	26-JUL-06 00:02:34	ST072506M2	ST072506M3	DV
25JUL06M	12	3963-001-0001-SA	061409-08	26-JUL-06 00:58:02	ST072506M2	ST072506M3	DV
25JUL06M	13	3963-002-0001-SA	061409-09	26-JUL-06 01:53:21	ST072506M2	ST072506M3	DV
25JUL06M	14	3963-003-0001-SA	061409-10	26-JUL-06 02:48:37	ST072506M2	ST072506M3	DV
25JUL06M	15	3967-001-0001-SA	C-4, S-1	26-JUL-06 03:43:56	ST072506M2	ST072506M3	DV
25JUL06M	16	3968-001-0001-SA	STC-1	26-JUL-06 04:39:22	ST072506M2	ST072506M3	DV
25JUL06M	17	3968-002-0001-SA	STC-2	26-JUL-06 05:34:41	ST072506M2	ST072506M3	DV
25JUL06M	18	3968-003-0001-SA	STC-3	26-JUL-06 06:30:01	ST072506M2	ST072506M3	DV
25JUL06M	19	3968-004-0001-SA	STC-4	26-JUL-06 07:25:21	ST072506M2	ST072506M3	DV
25JUL06M	20	SB072506M3	Solvent Blank	26-JUL-06 08:20:42	ST072506M2	ST072506M3	DV
25JUL06M	21	ST072506M3	1613 CS3 (051212J)	26-JUL-06 09:16:01	ST072506M2	ST072506M3	DV

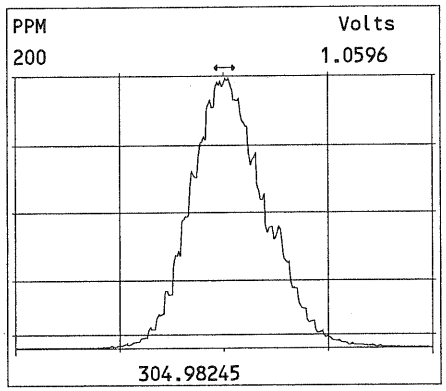
7/26/06

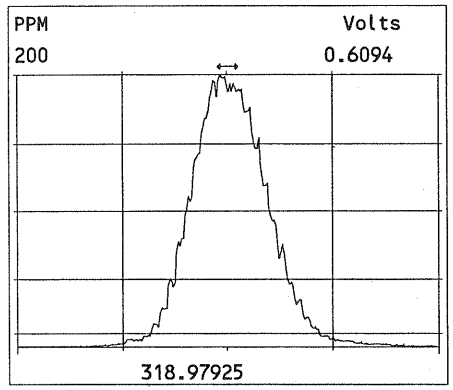
Data Backed Up:_____

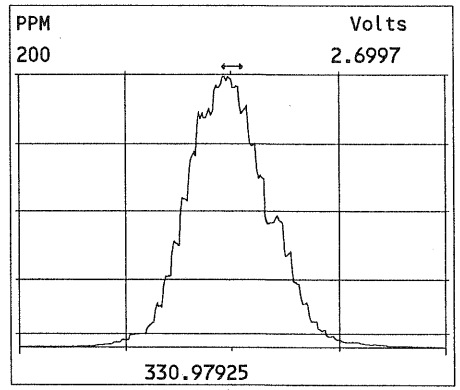
Date:_____

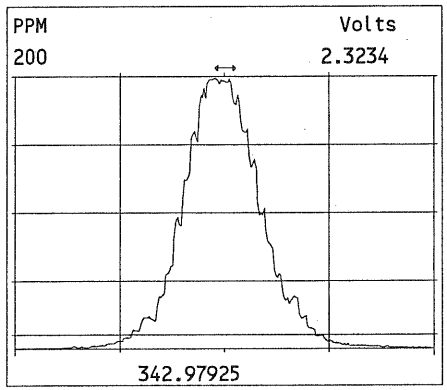
Peak Locate Examination:25-JUL-2006:14:39 File:25JUL06M
Experiment:PCDD Function:1 Reference:PFK

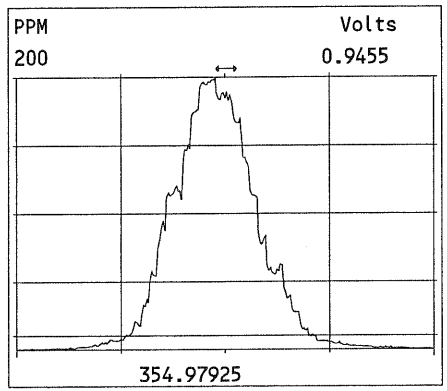


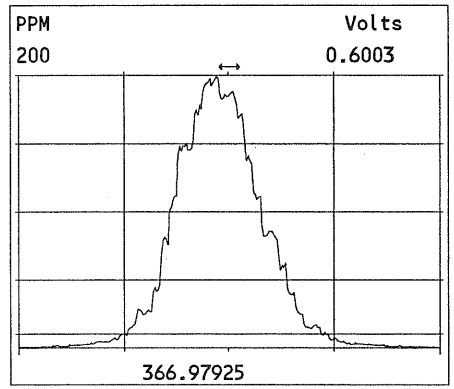


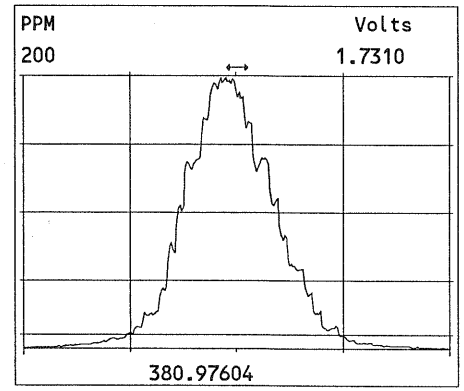


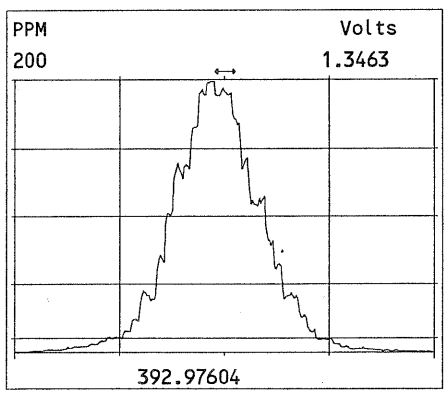


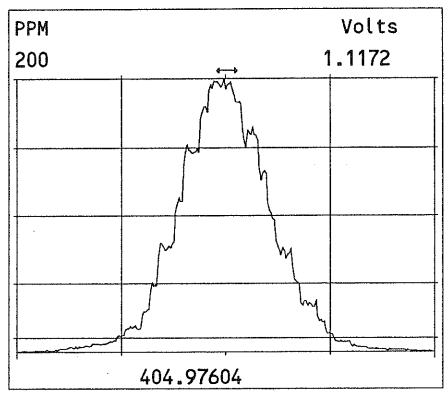


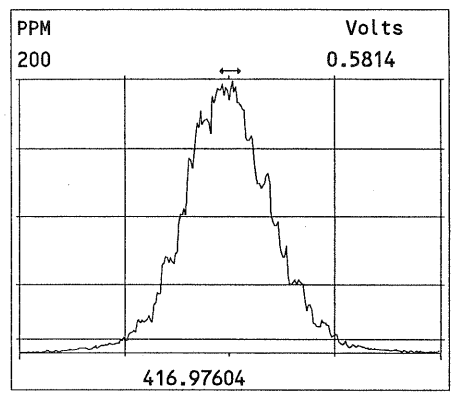




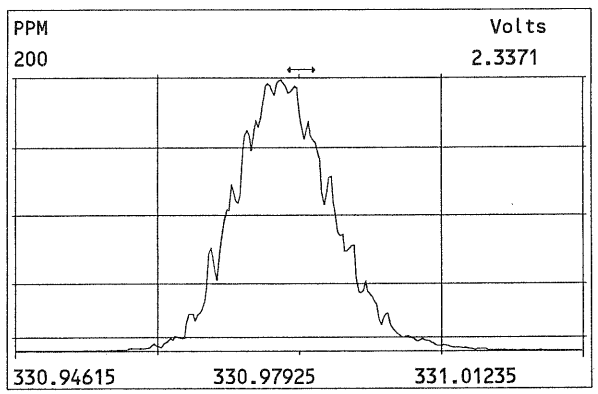


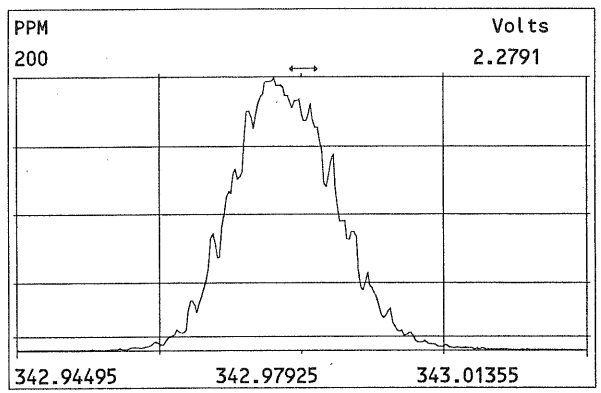


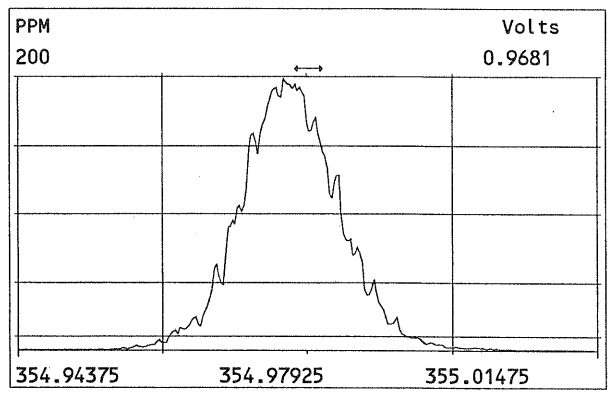


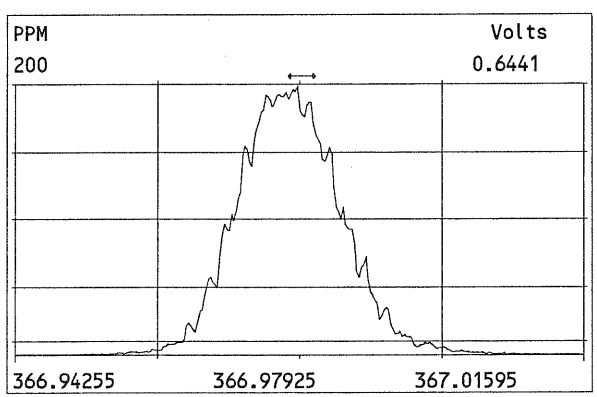


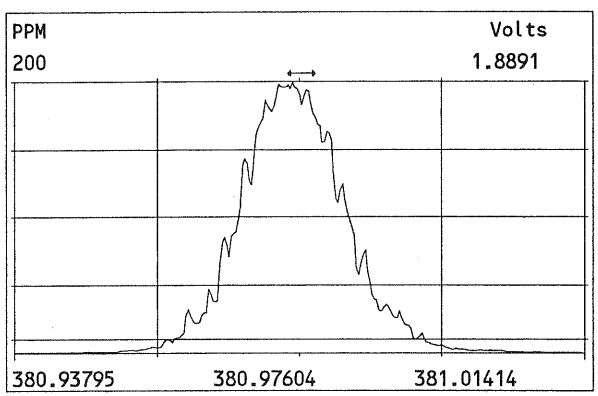
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:2 Reference:PFK

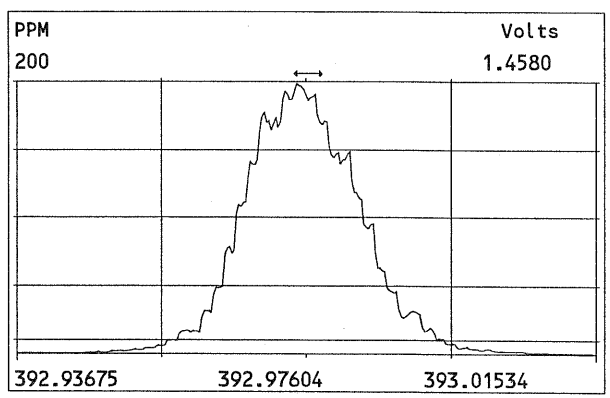


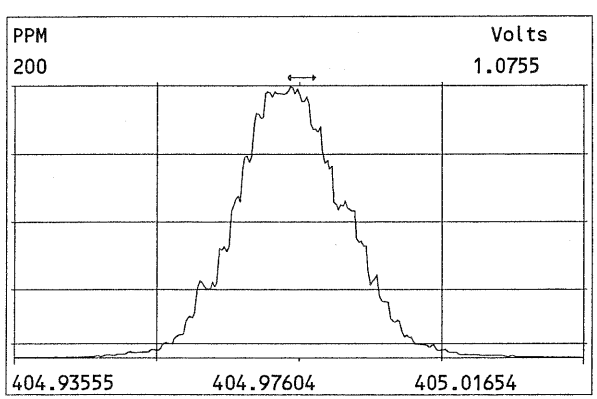


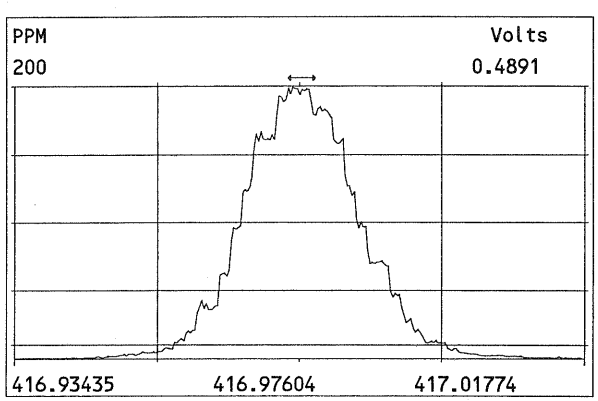




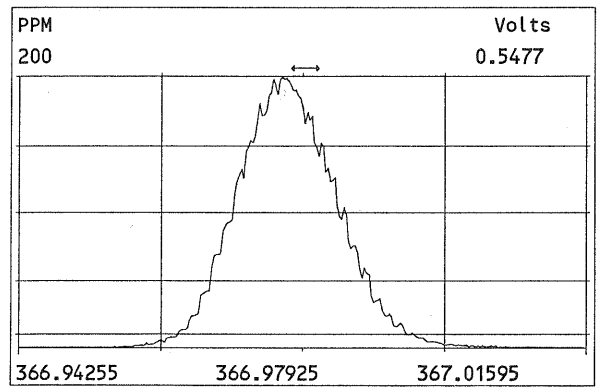


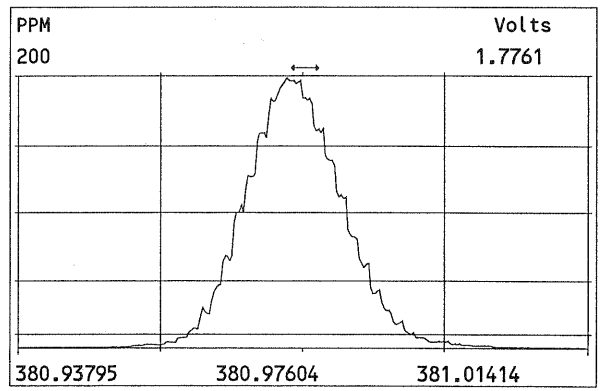


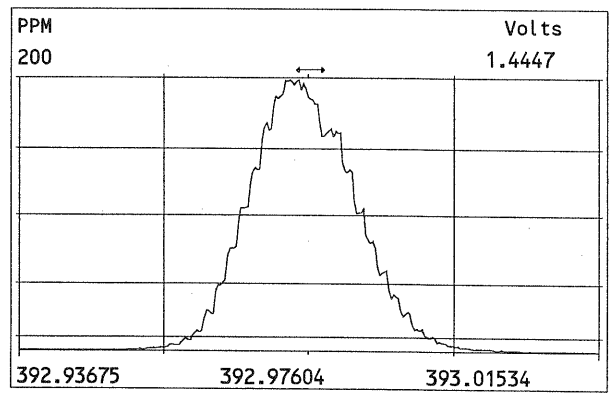


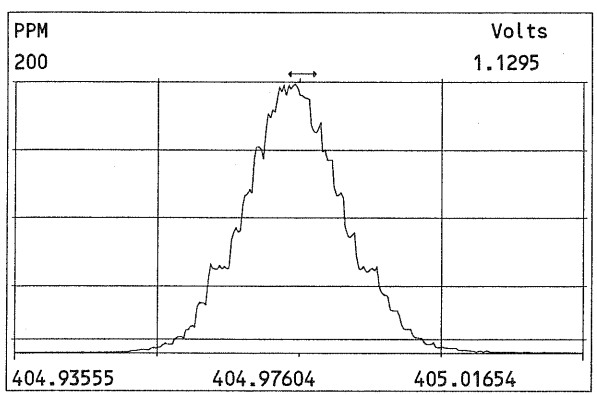


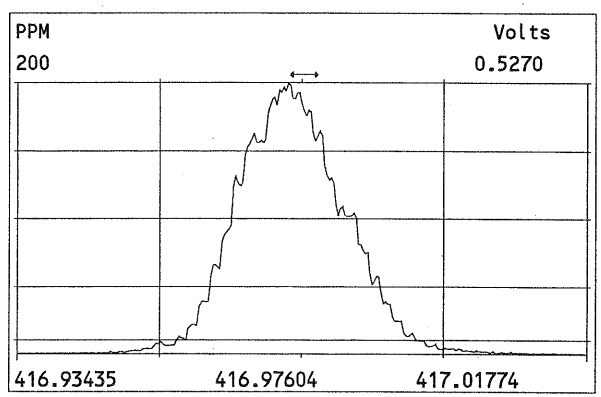
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:3 Reference:PFK

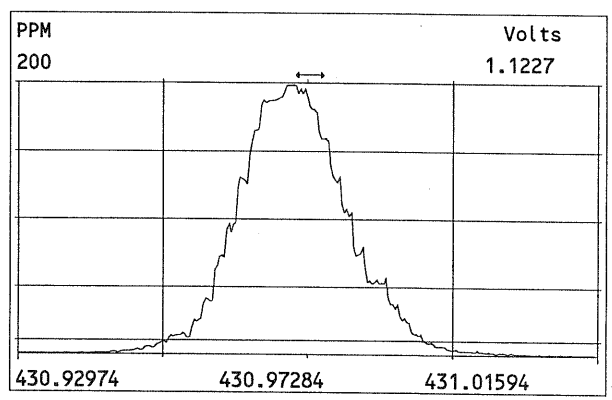


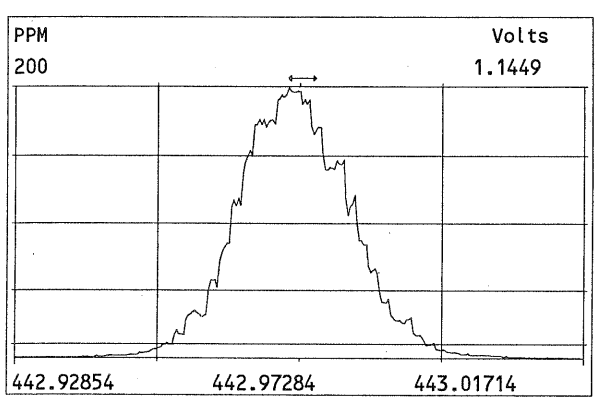


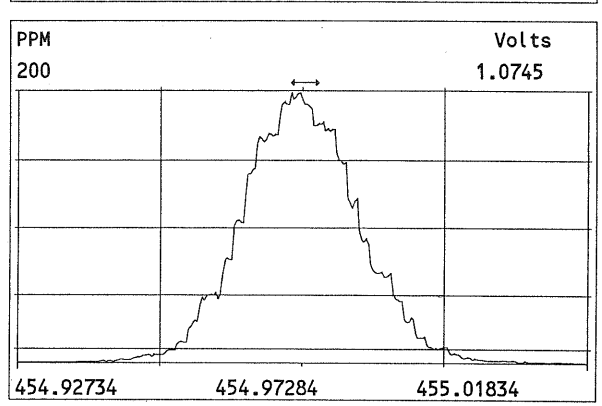






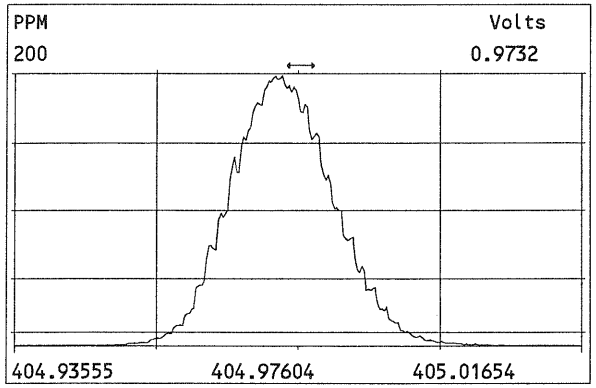


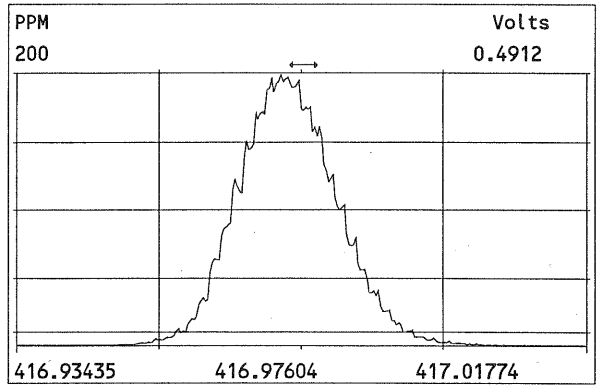


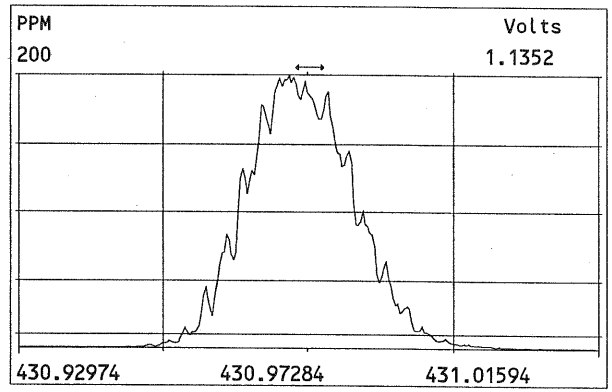


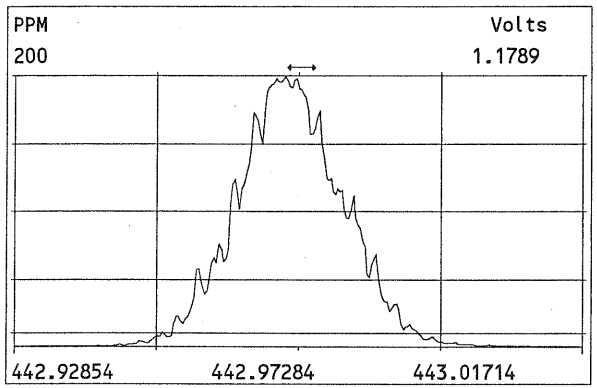
620

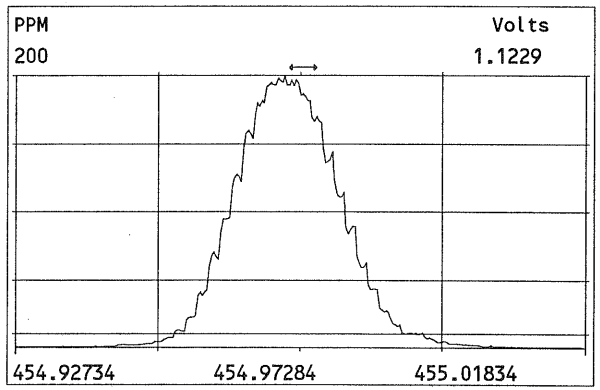
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:4 Reference:PFK

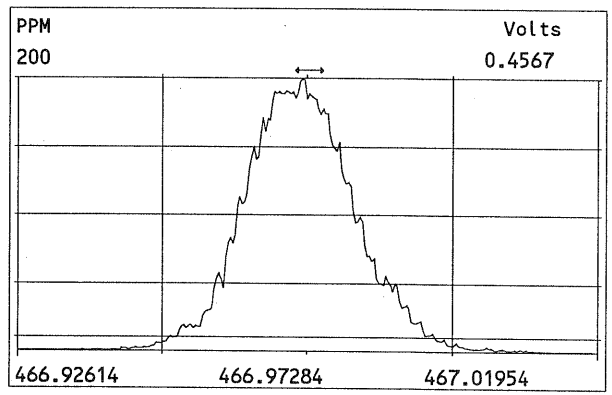


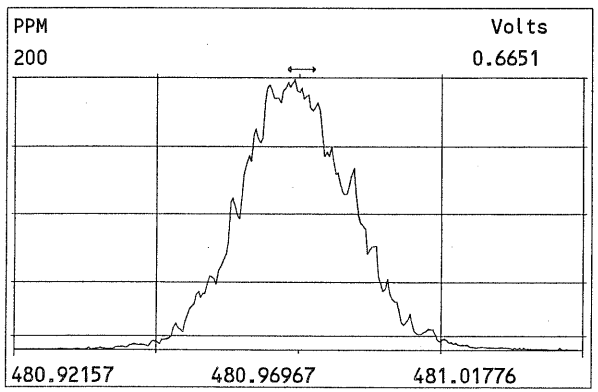




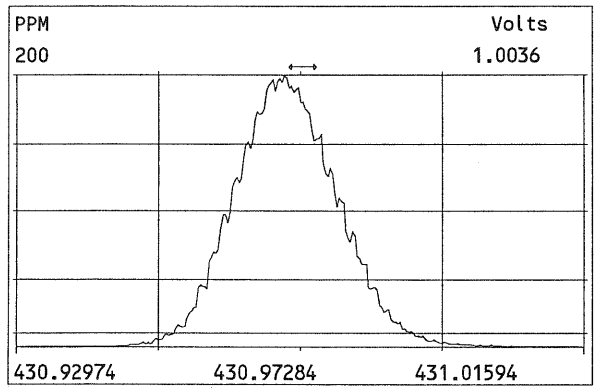


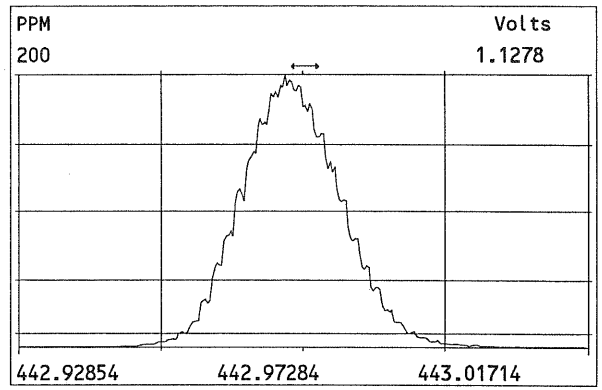


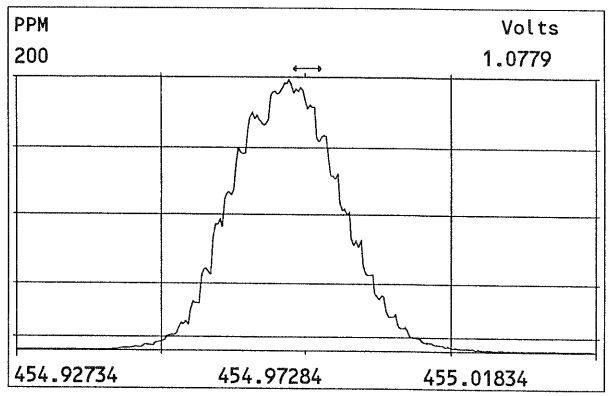


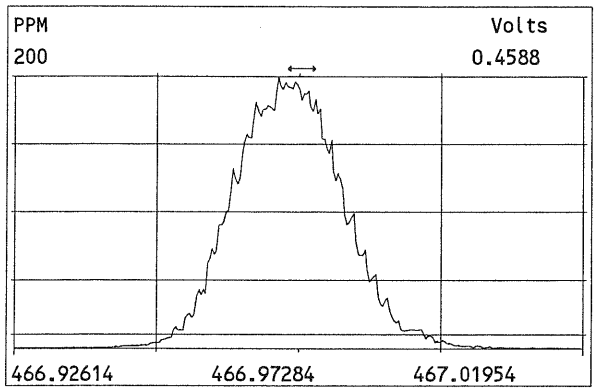


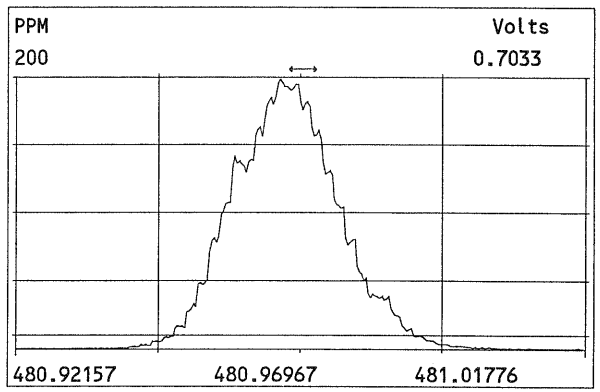
Peak Locate Examination:25-JUL-2006:14:41 File:25JUL06M
Experiment:PCDD Function:5 Reference:PFK

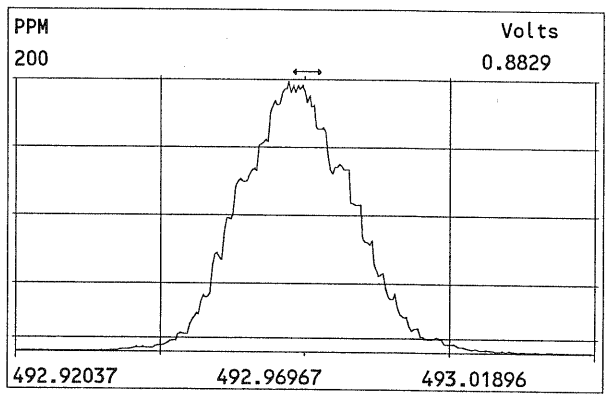


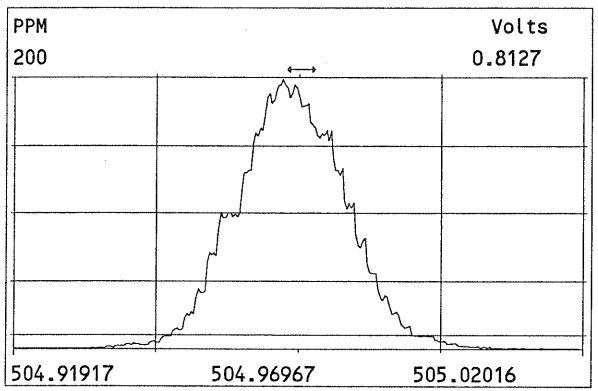


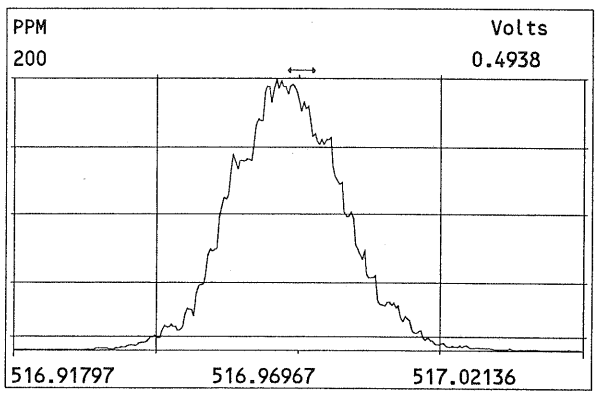












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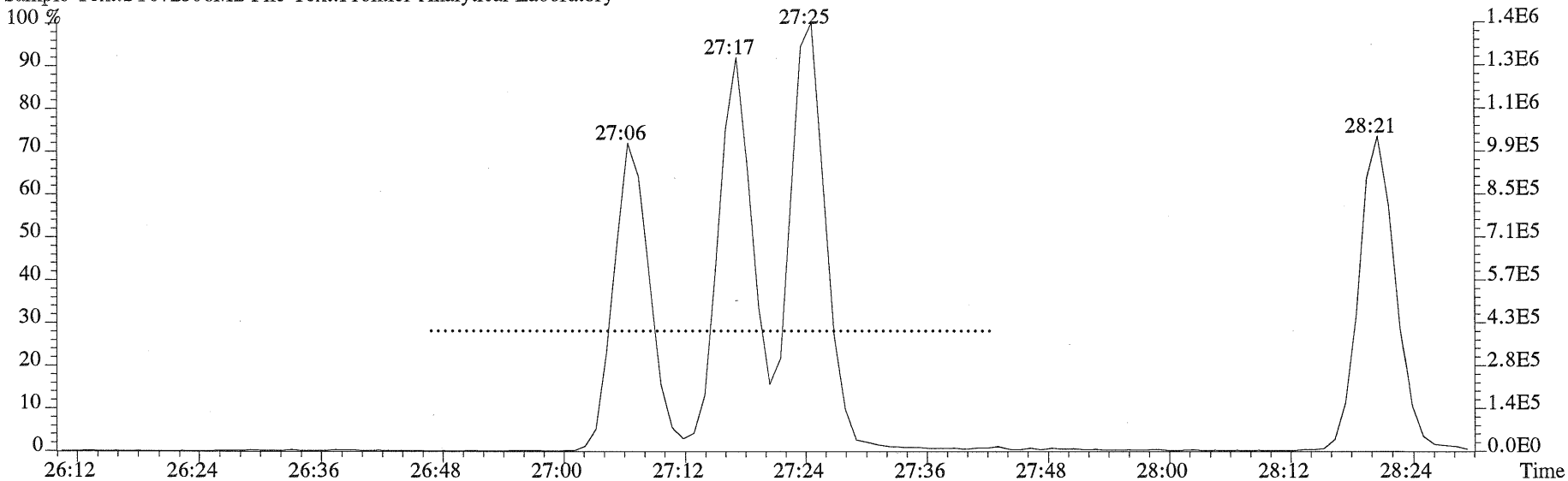
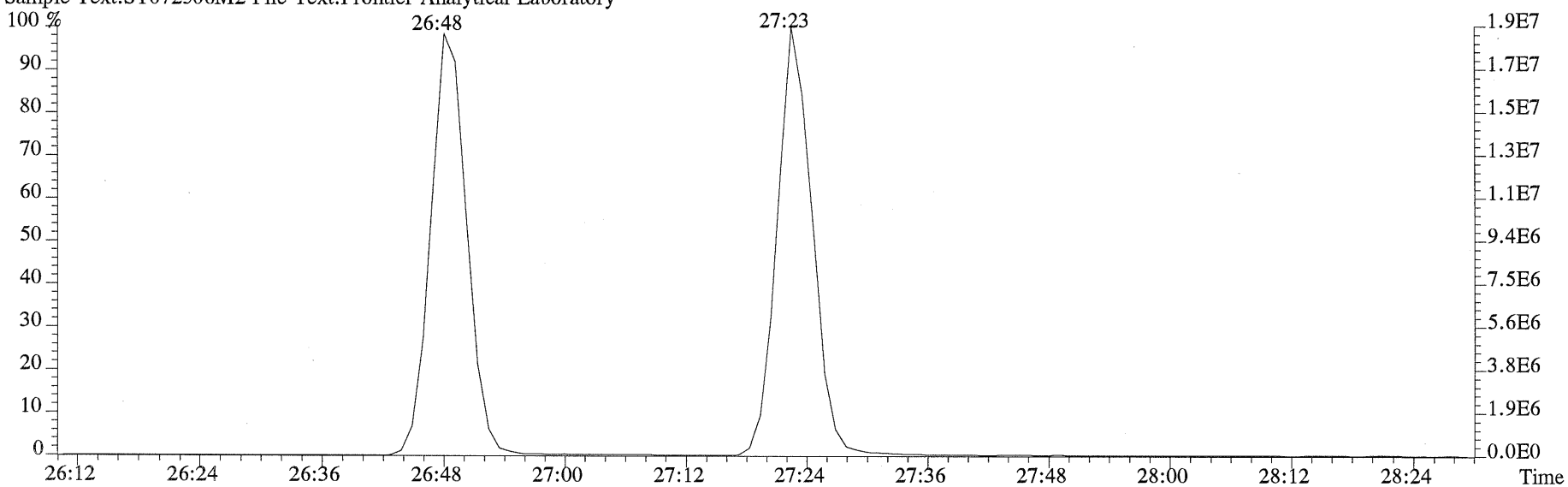
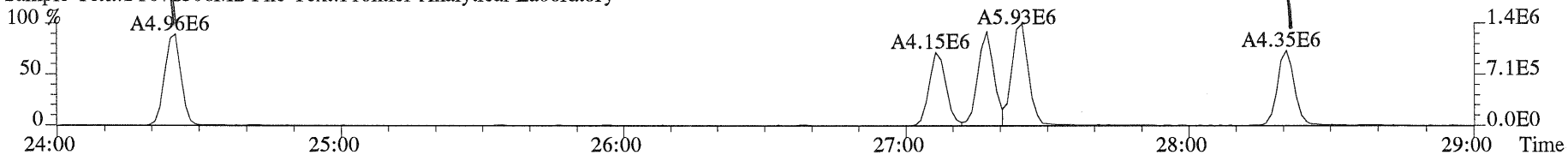
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:10 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:10 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
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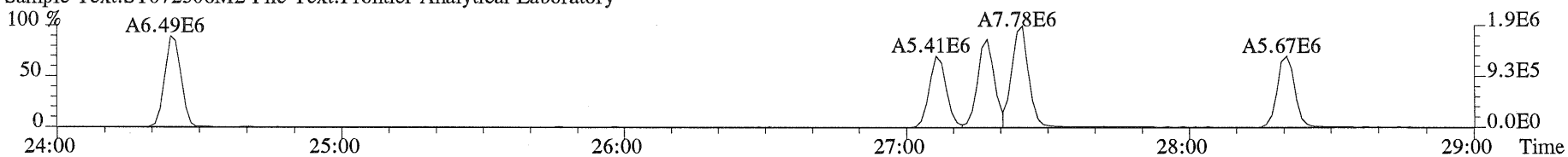
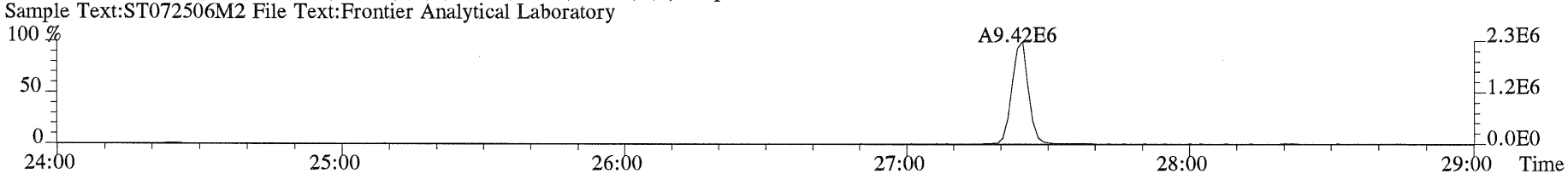
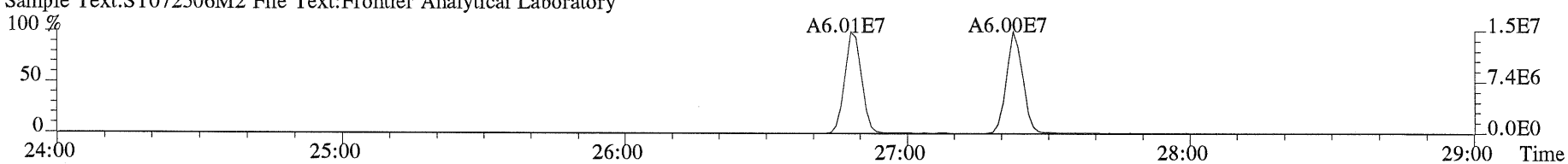
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



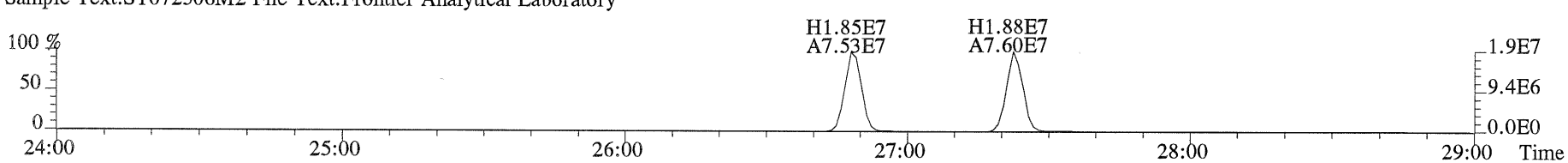
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



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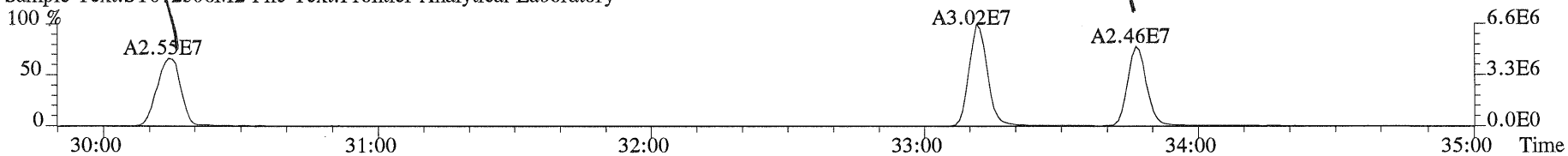
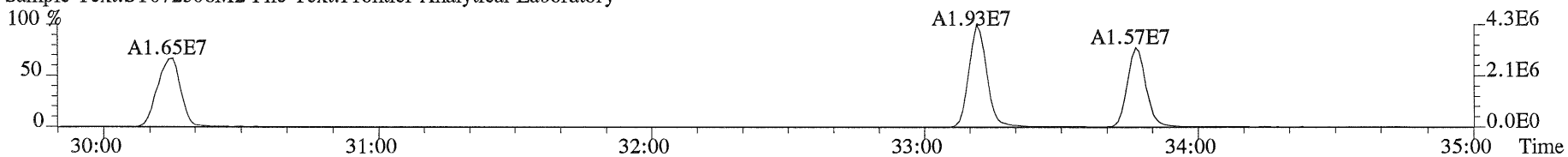
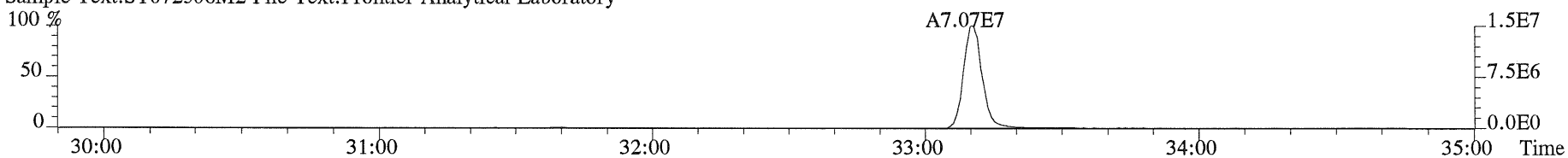
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



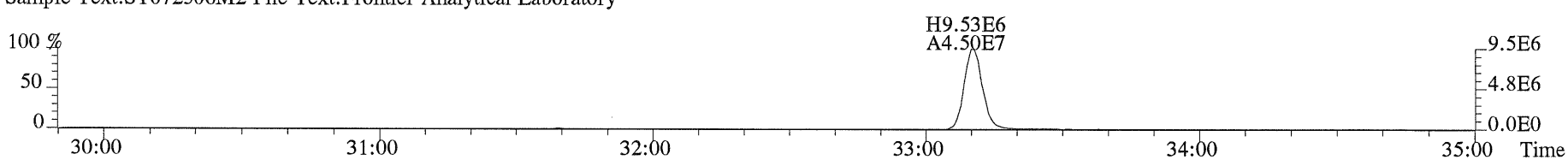
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



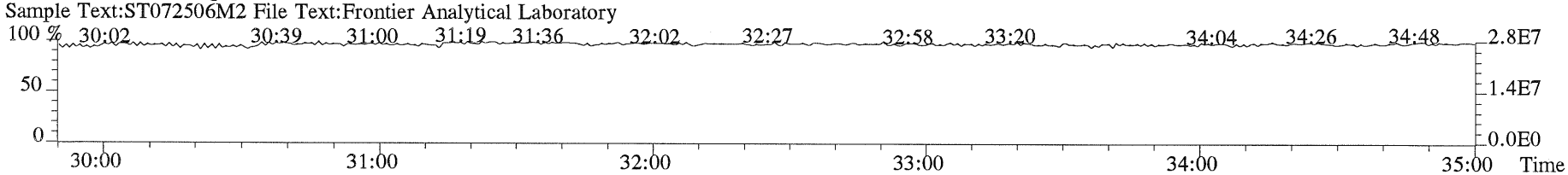
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:10 F:2 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



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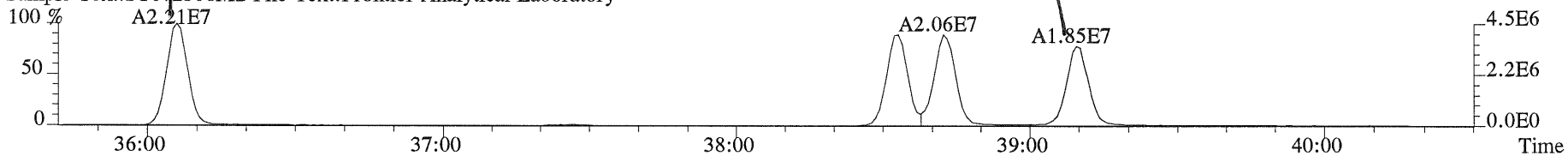
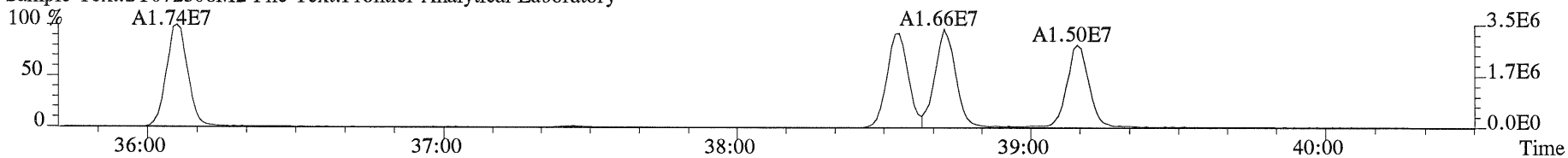
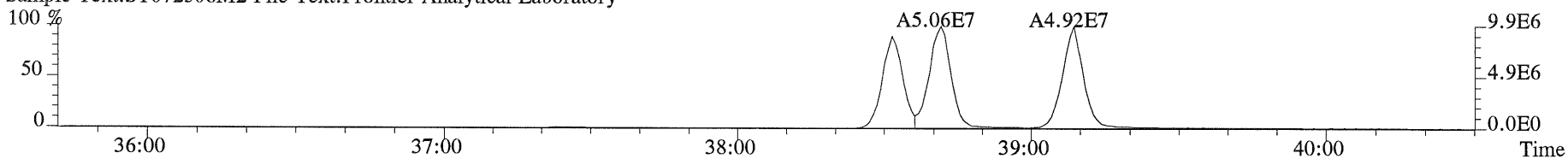
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



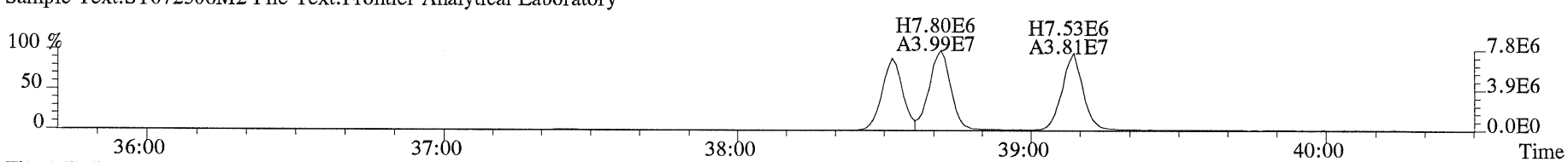
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



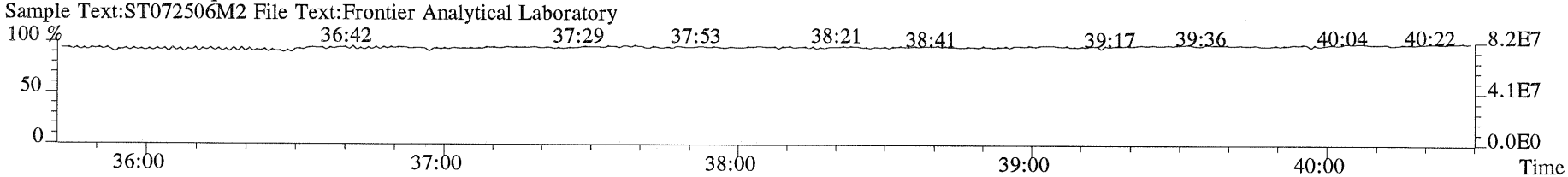
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

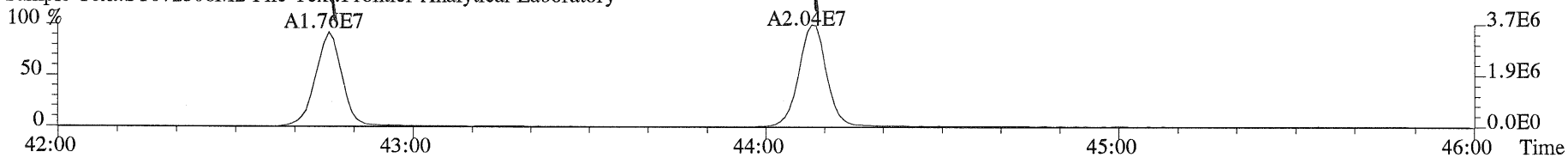


File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:10 F:3 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

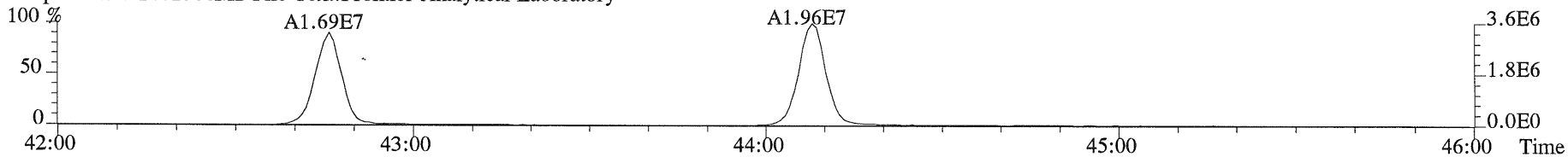


Klamath River Sediment Study

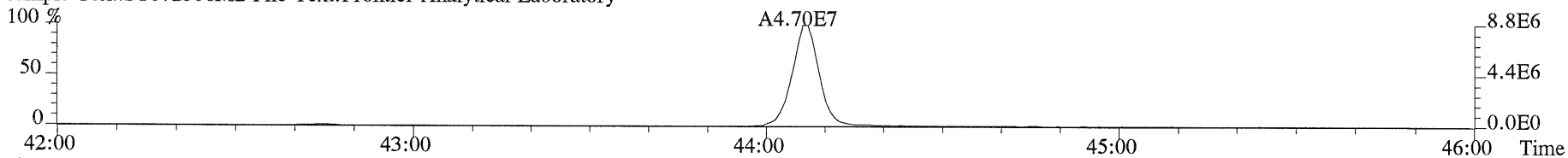
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



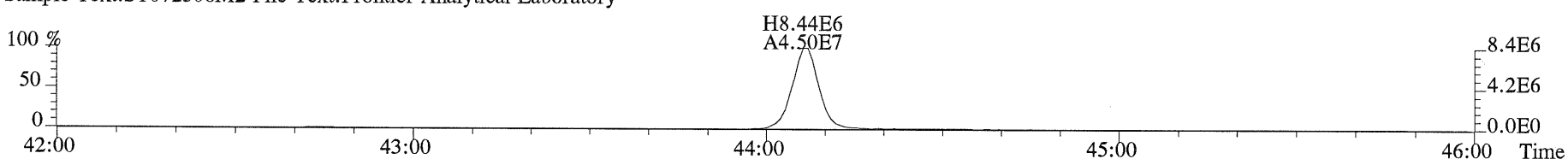
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



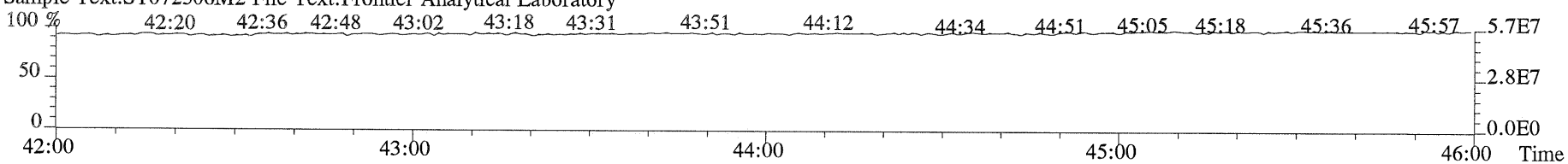
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



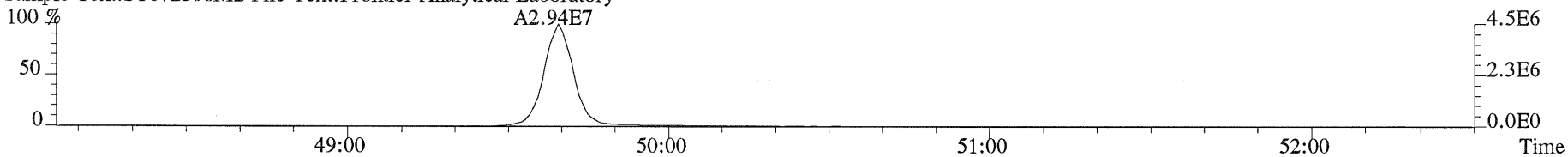
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



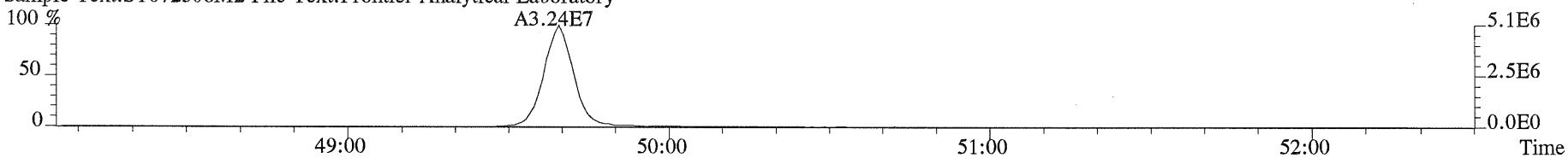
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:10 F:4 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



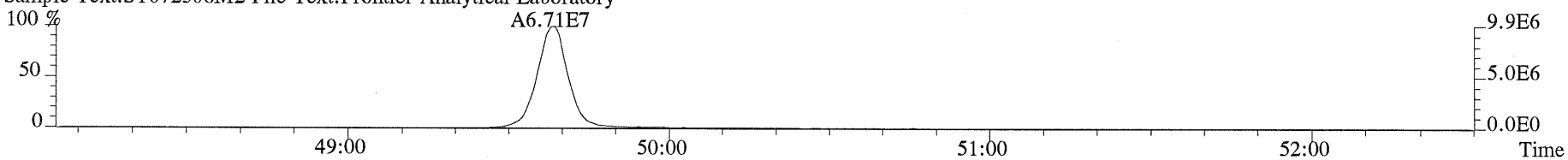
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



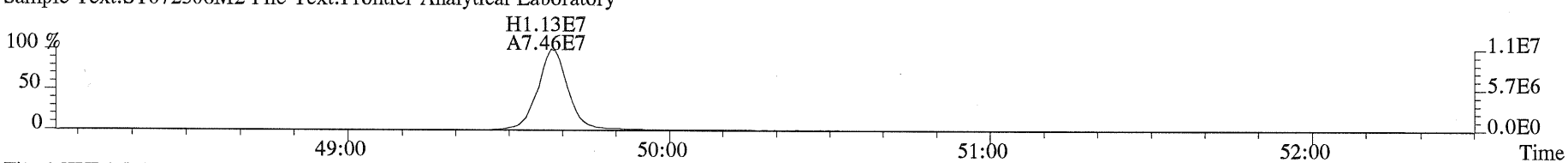
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



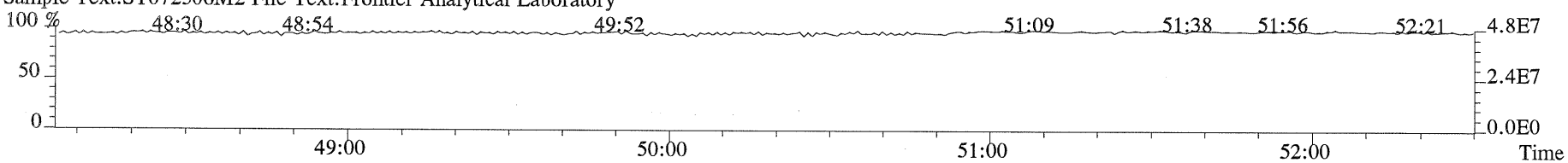
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



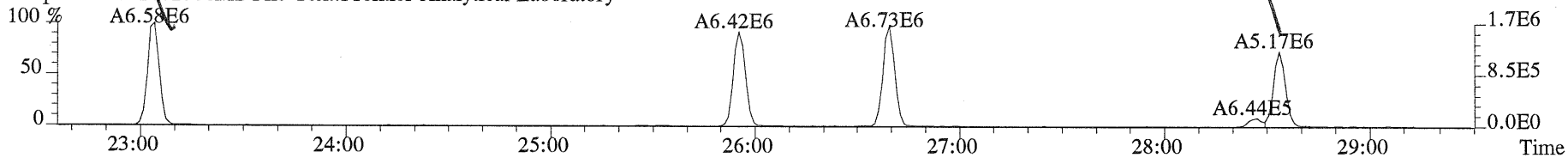
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



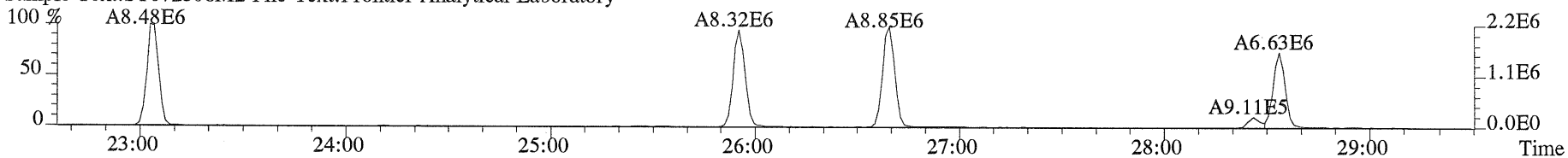
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:10 F:5 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



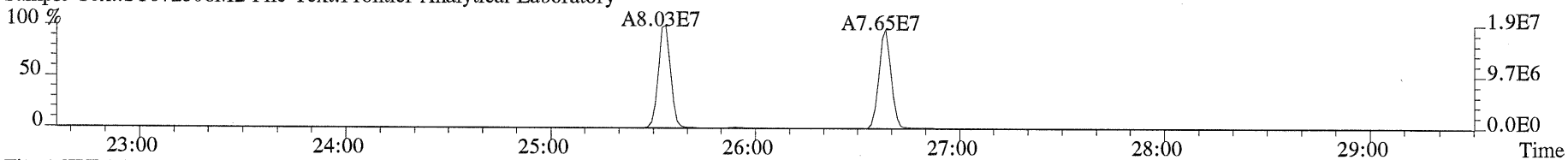
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



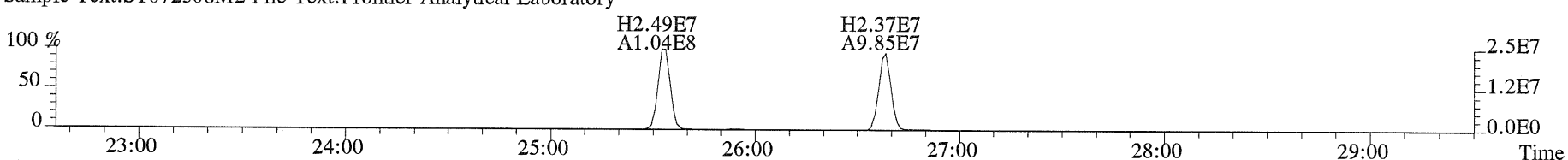
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



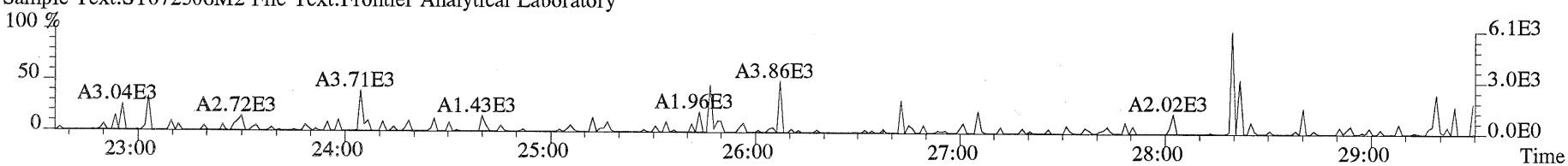
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



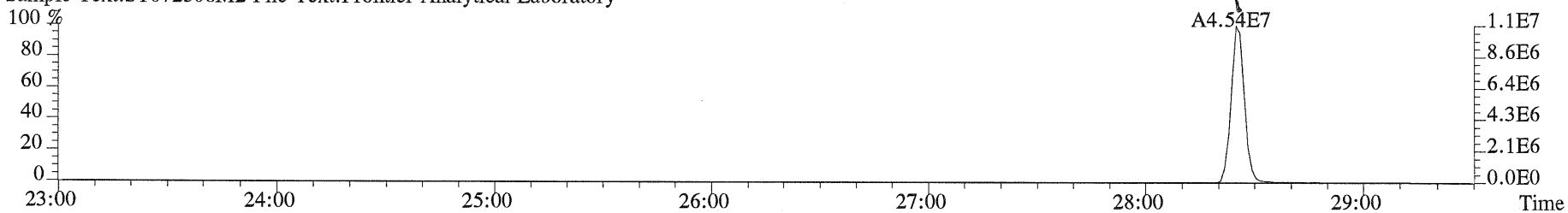
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



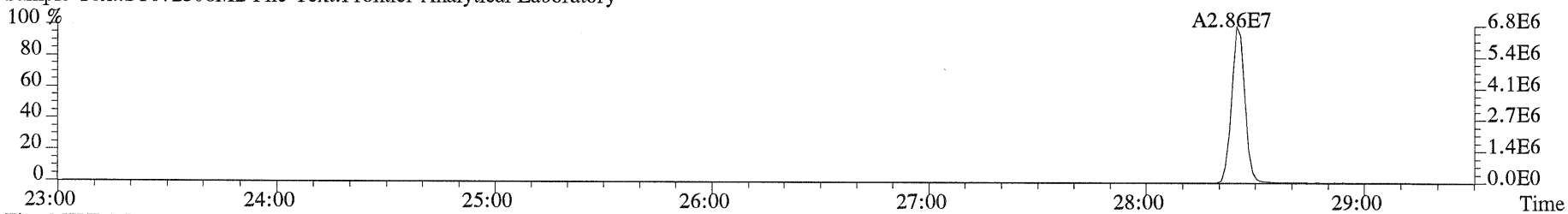
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



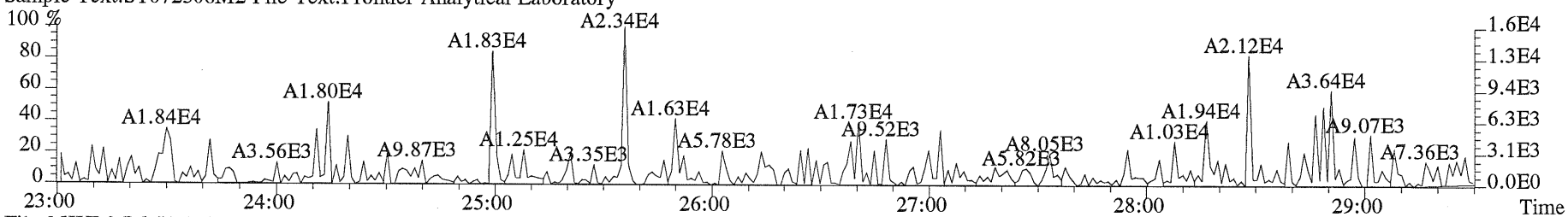
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



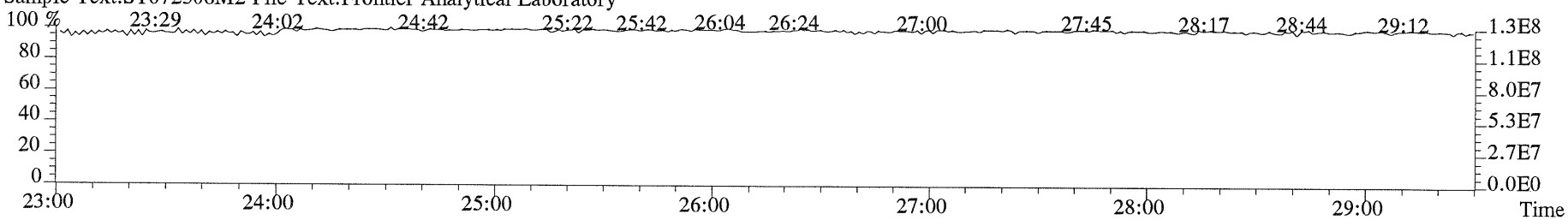
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



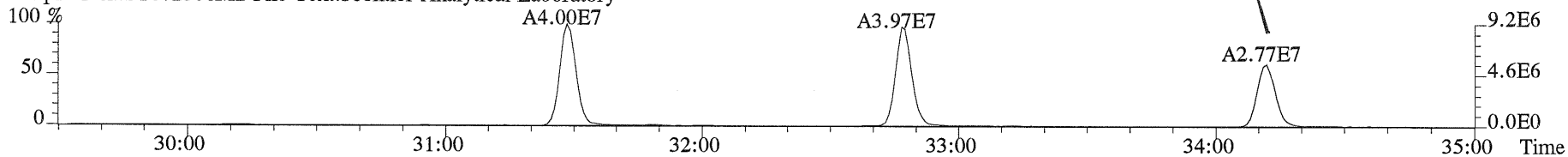
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



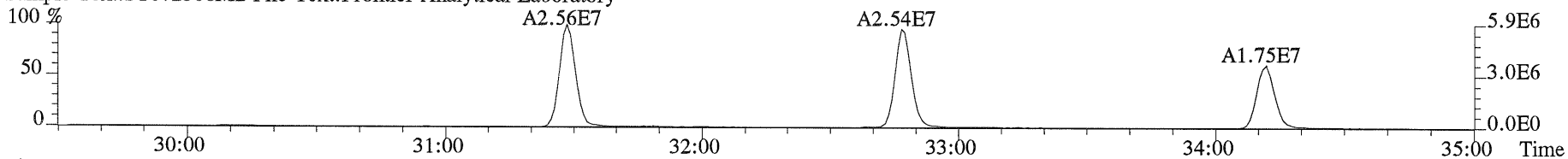
File:25JUL06M #1-390 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:10 Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



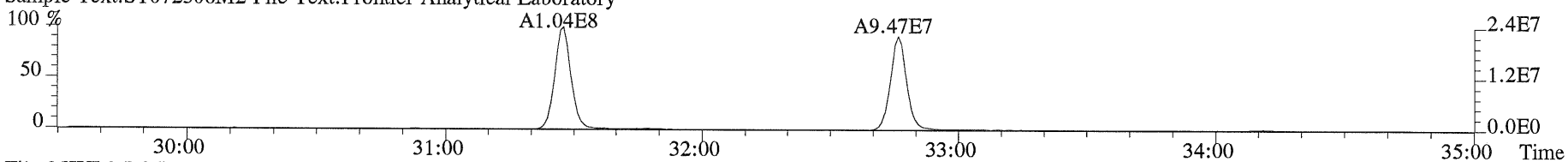
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



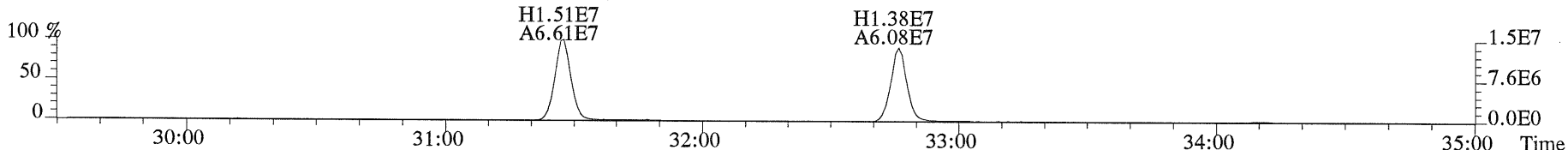
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



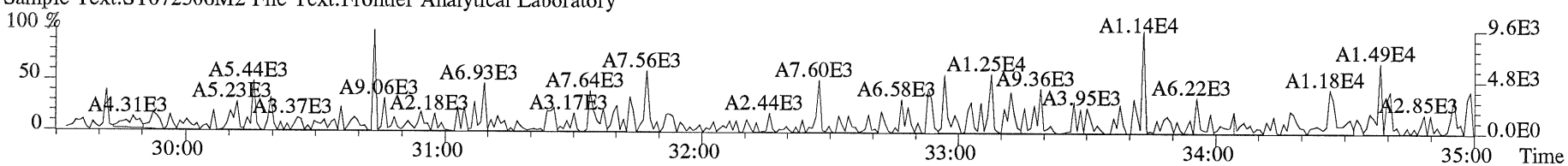
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



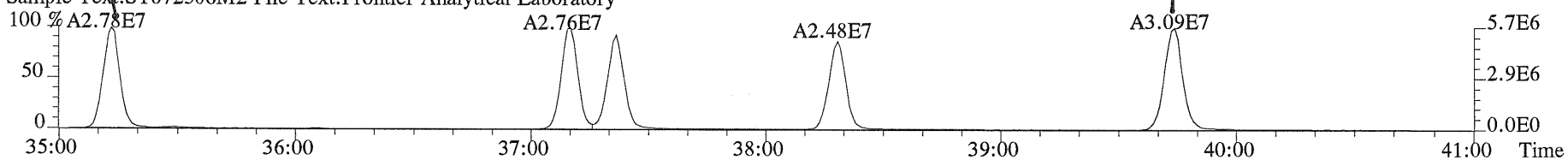
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



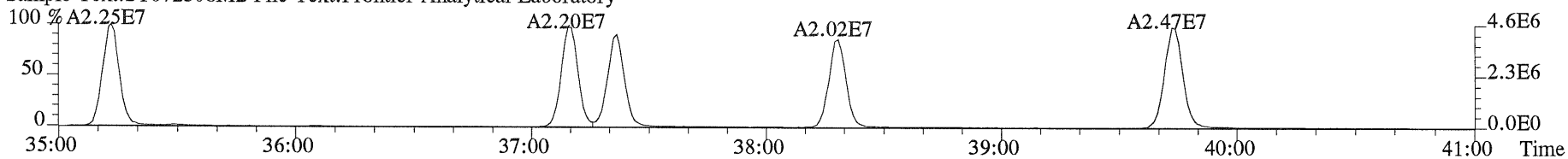
File:25JUL06M #1-425 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:10 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



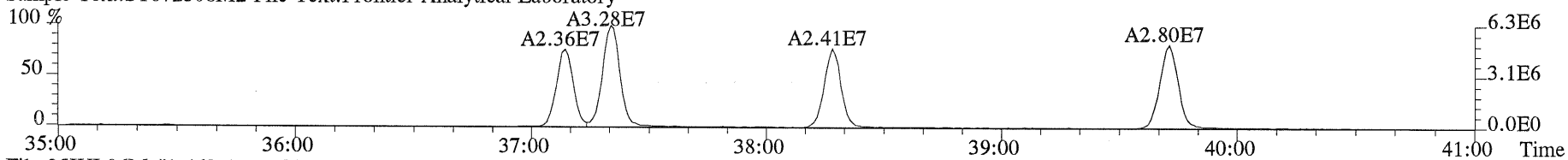
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



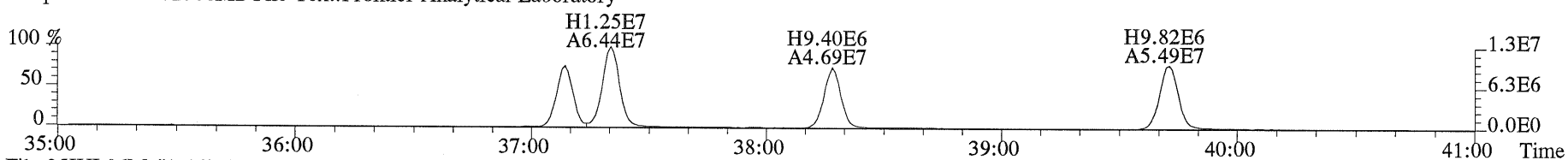
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



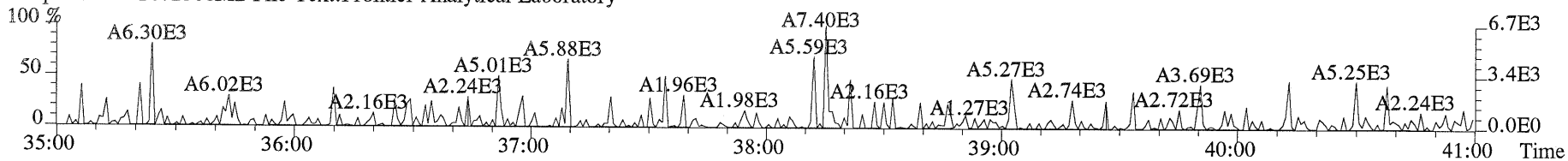
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



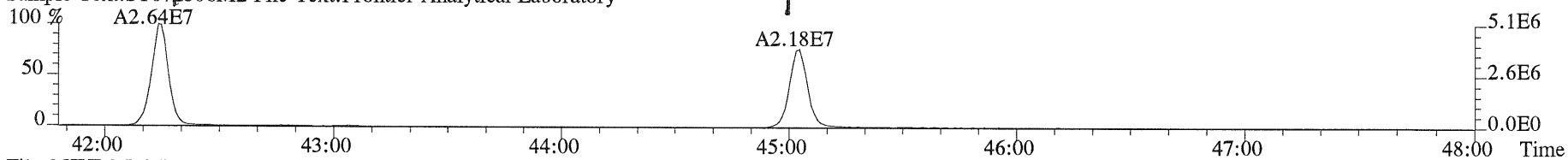
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



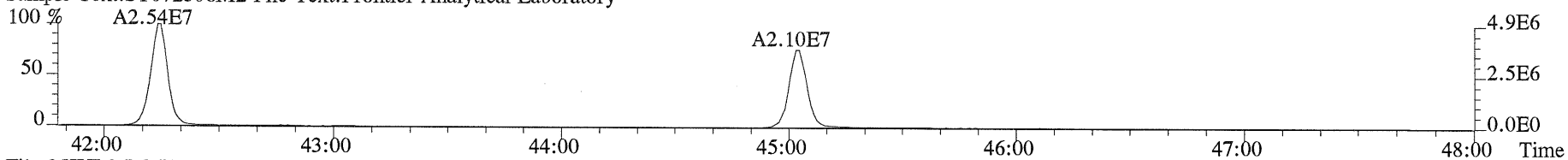
File:25JUL06M #1-463 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:10 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



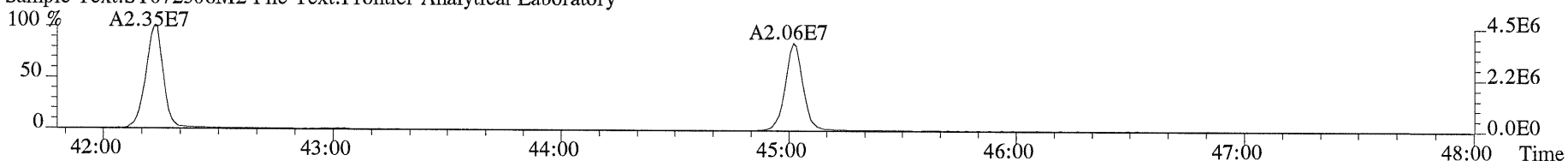
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



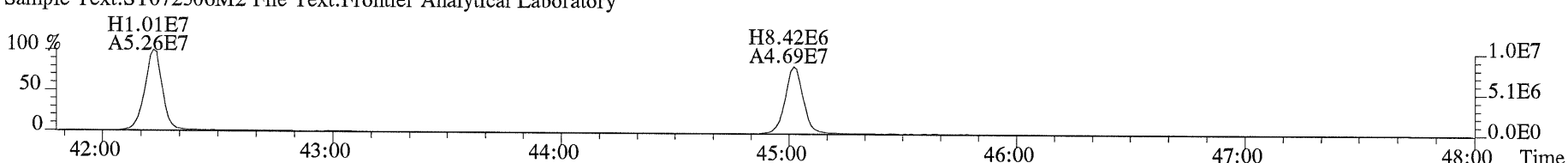
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



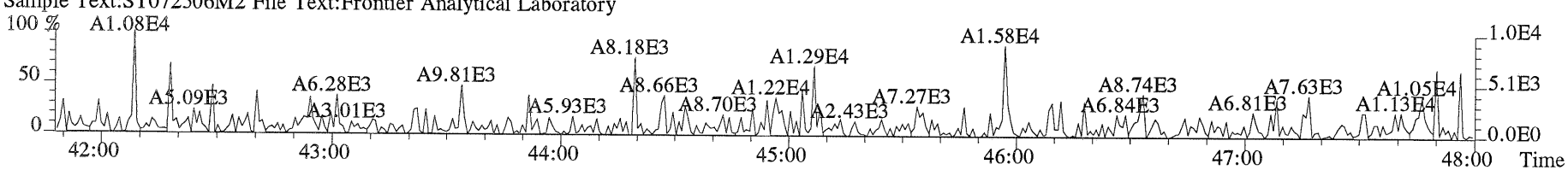
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



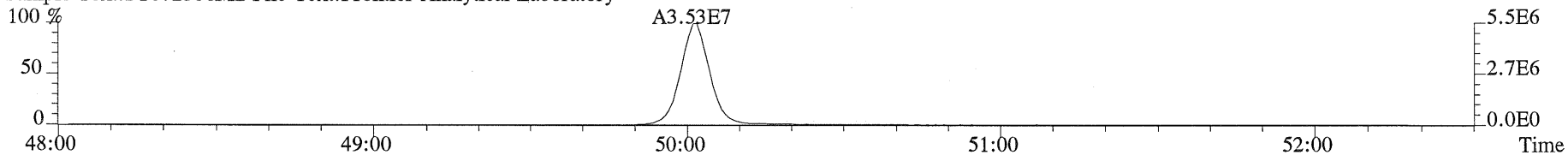
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



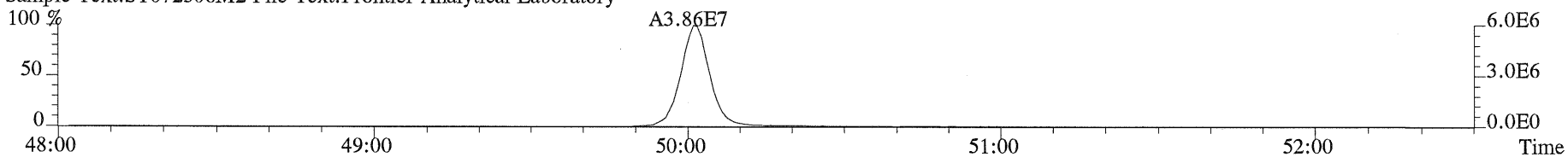
File:25JUL06M #1-541 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:10 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



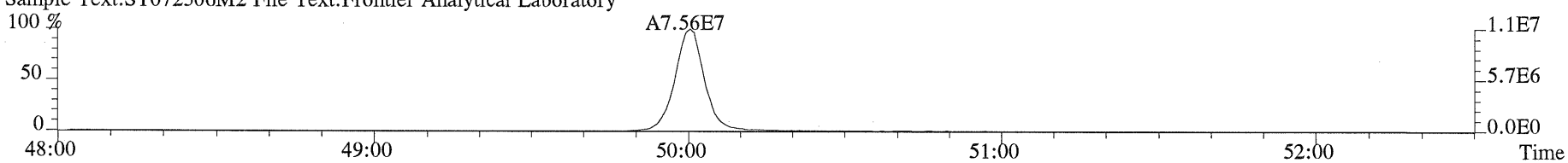
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



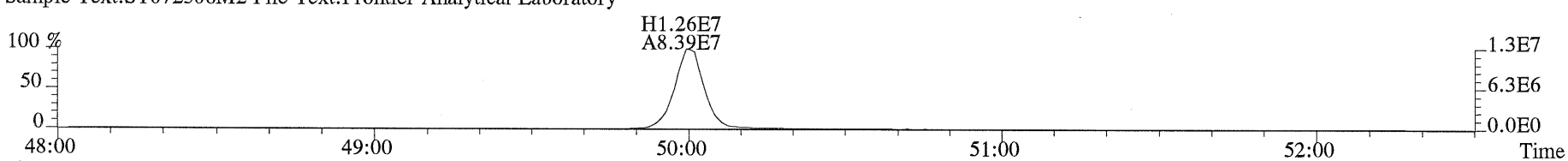
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



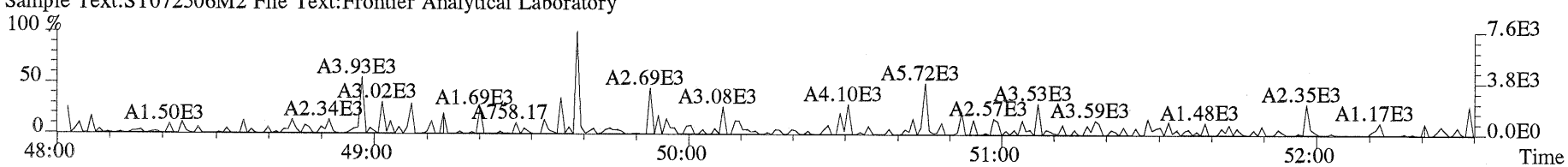
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory



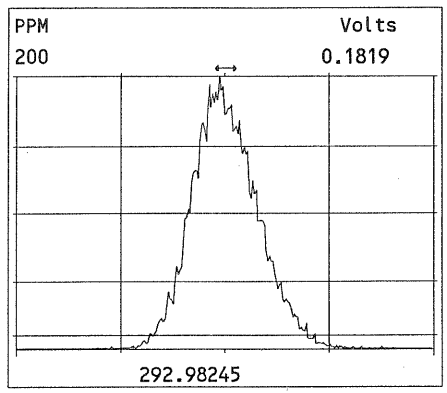
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

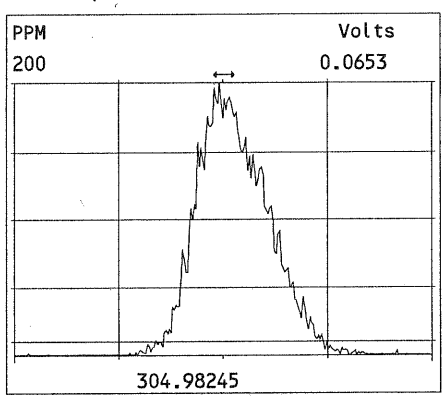


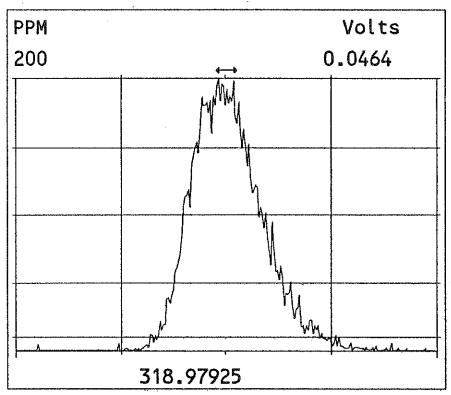
File:25JUL06M #1-348 Acq:25-JUL-2006 23:07:06 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:10 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M2 File Text:Frontier Analytical Laboratory

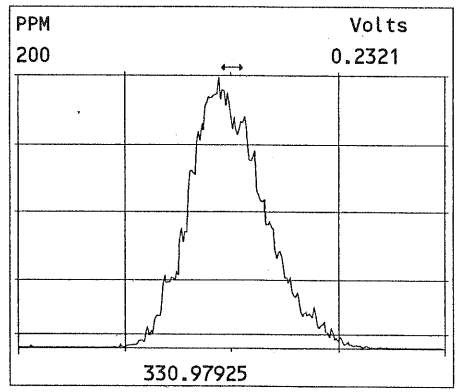


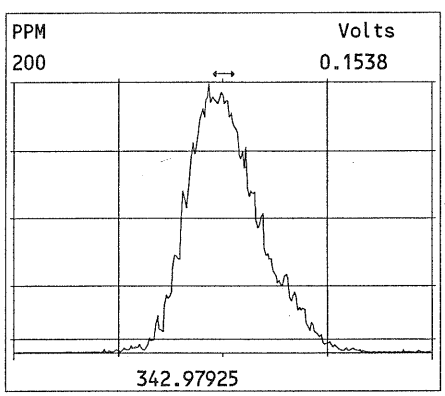
Peak Locate Examination:26-JUL-2006:10:12 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

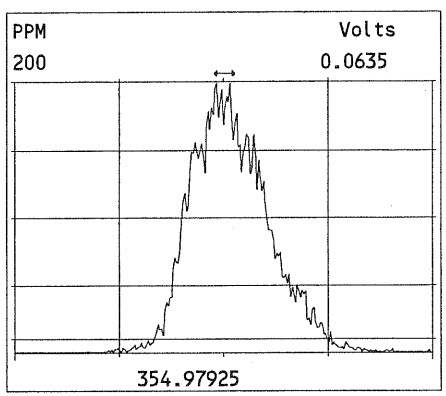


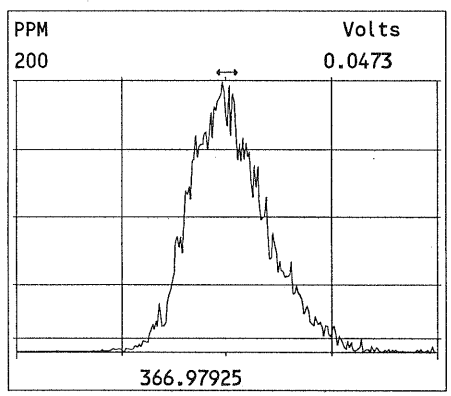


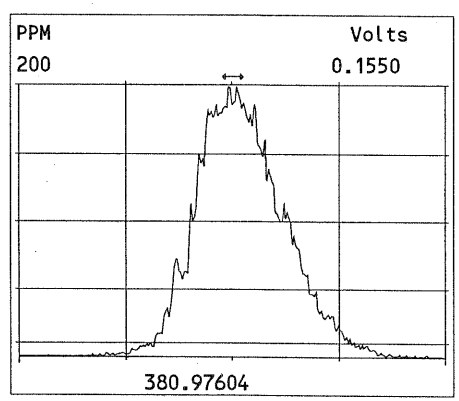


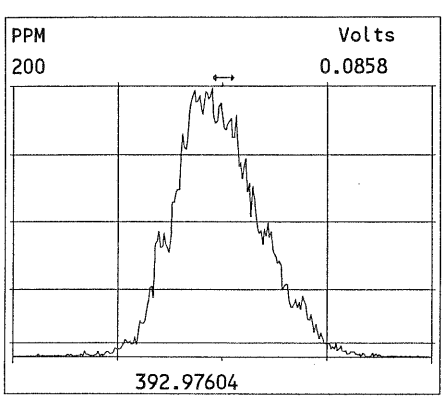


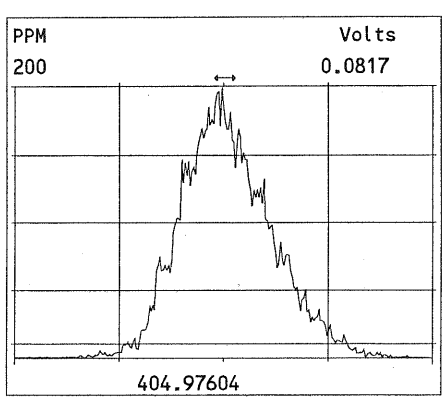


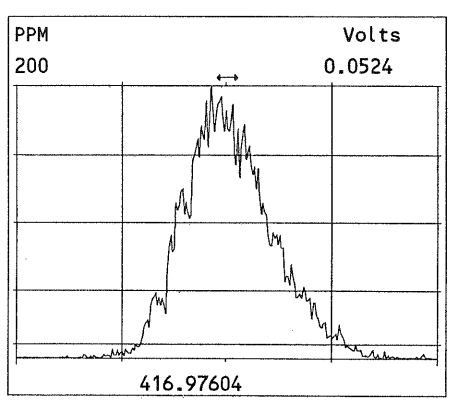












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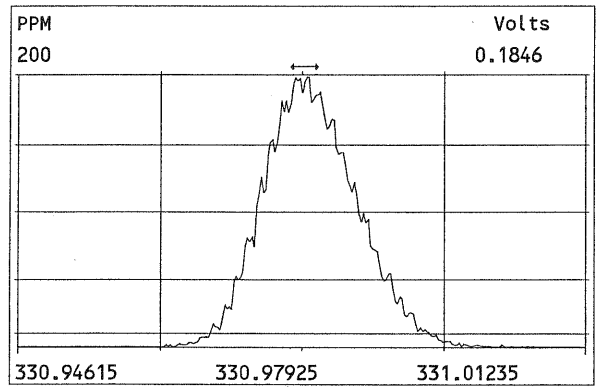
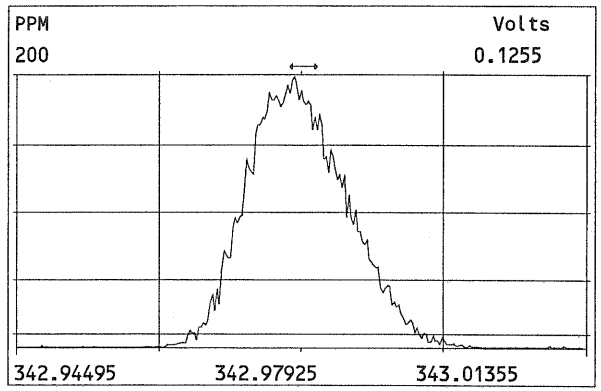
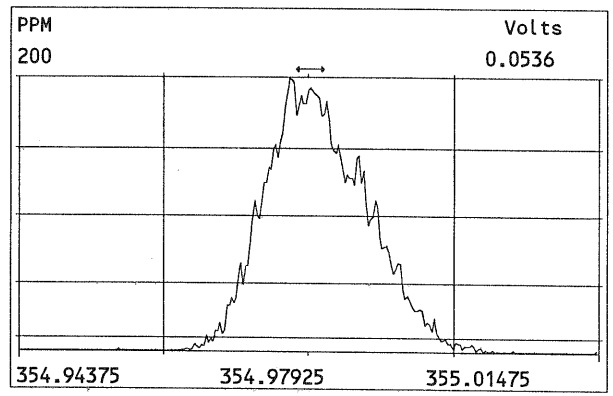
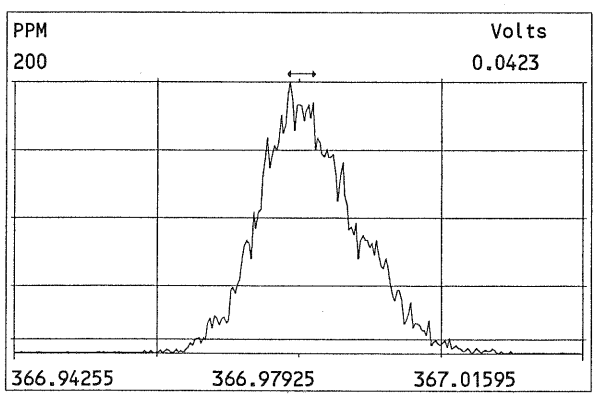
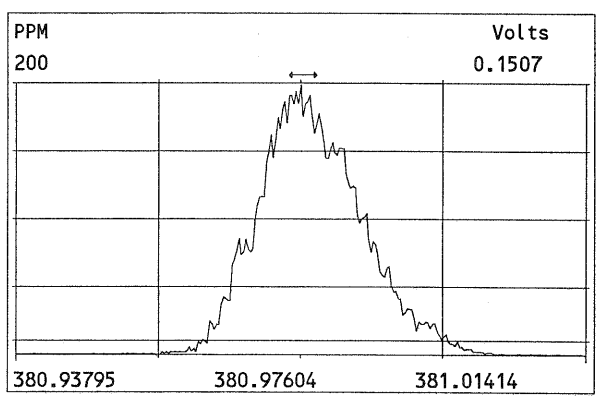
Peak Locate Examination:26-JUL-2006:10:14 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

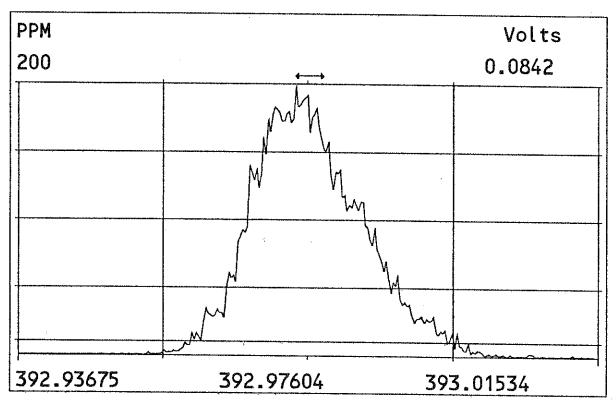


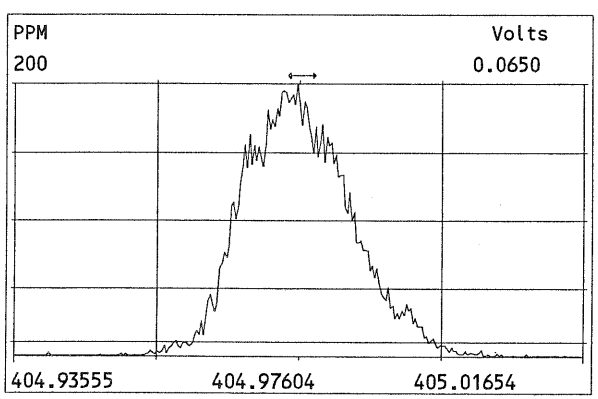


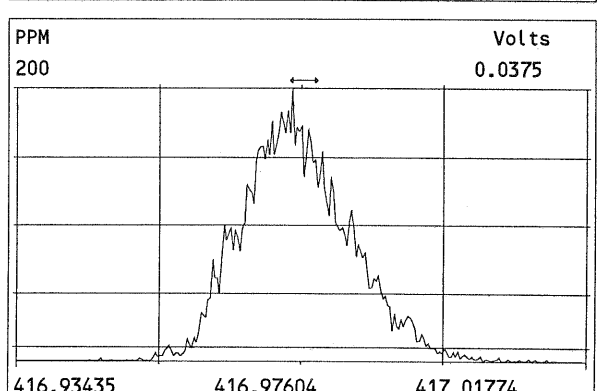












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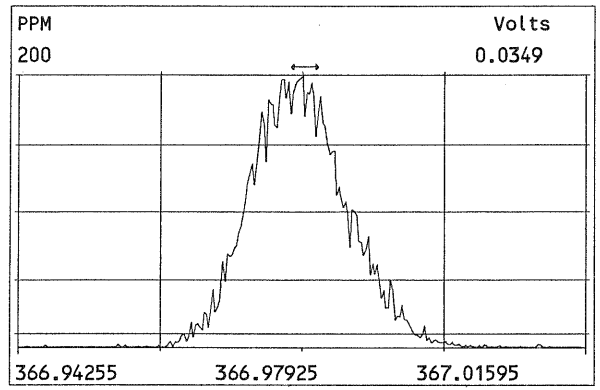
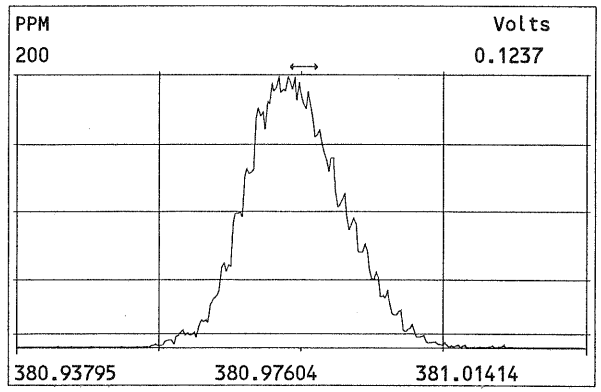
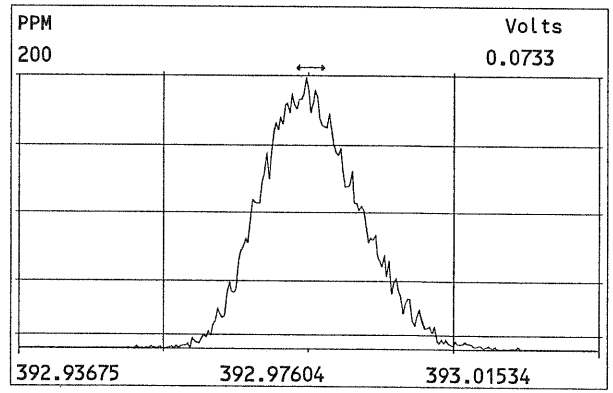
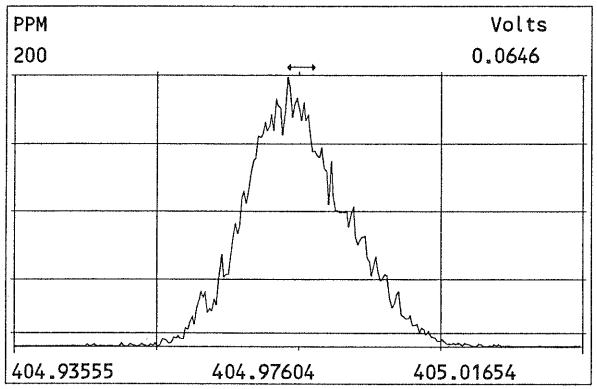
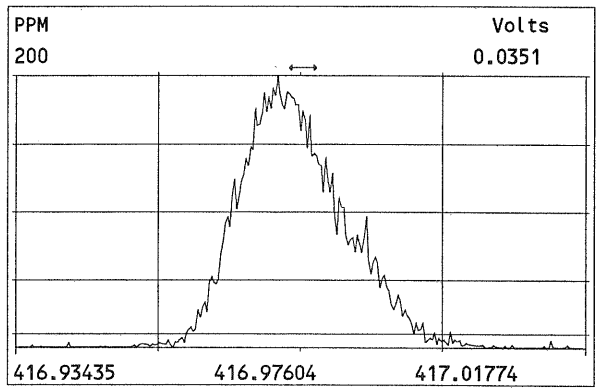
Peak Locate Examination:26-JUL-2006:10:16 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

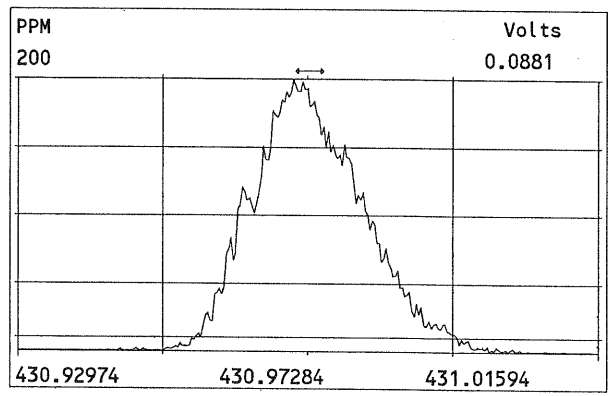


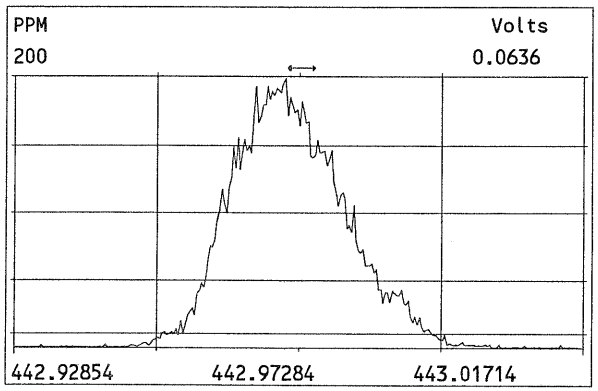


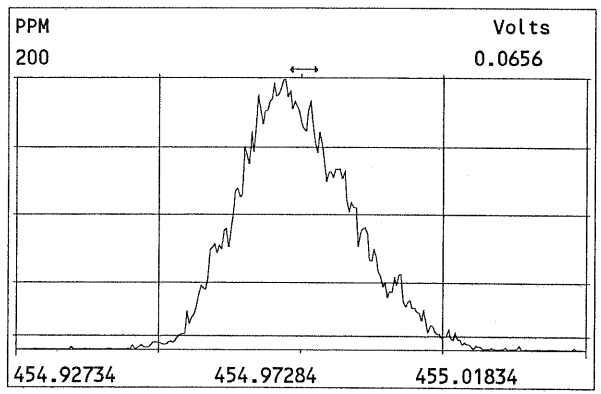




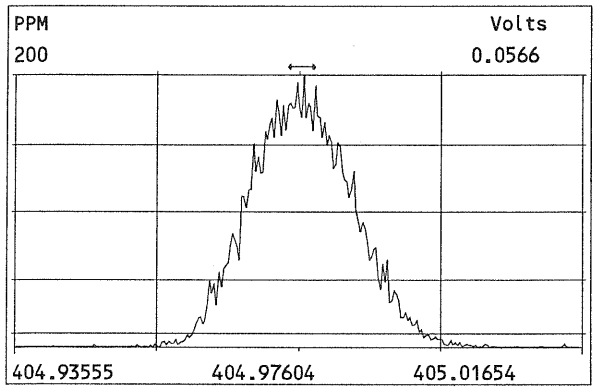


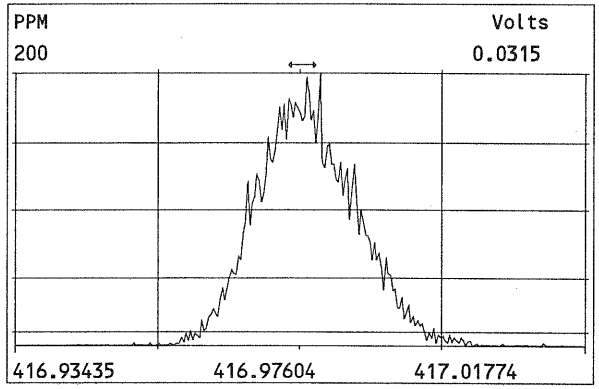


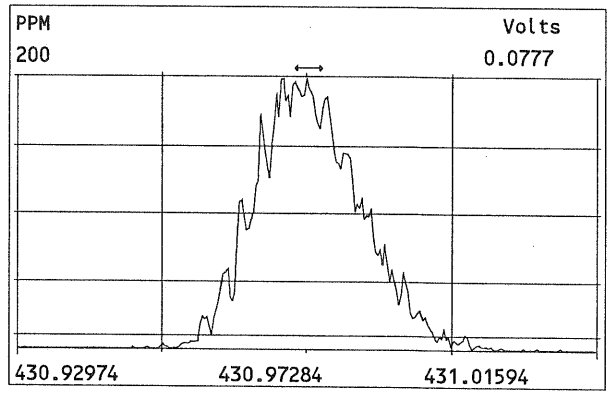


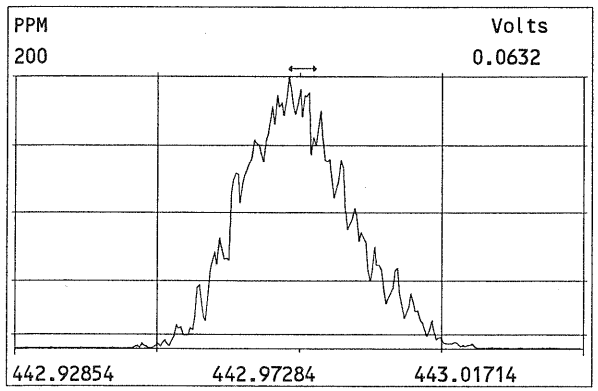


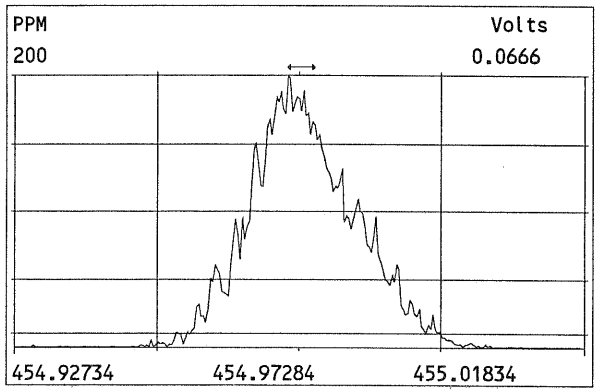
Peak Locate Examination:26-JUL-2006:10:18 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

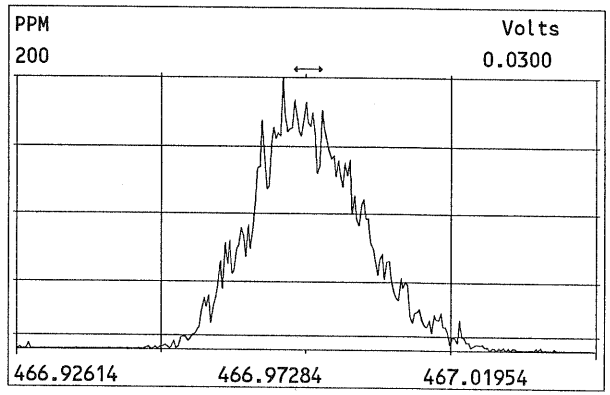


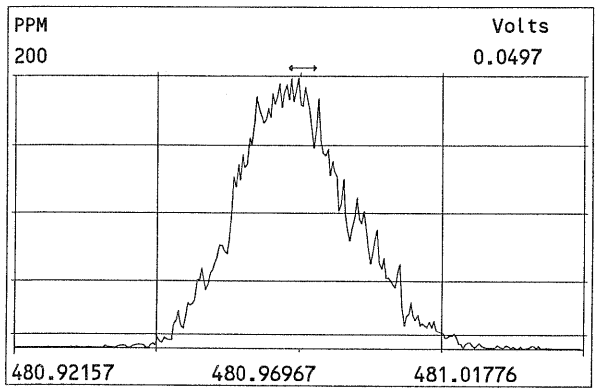




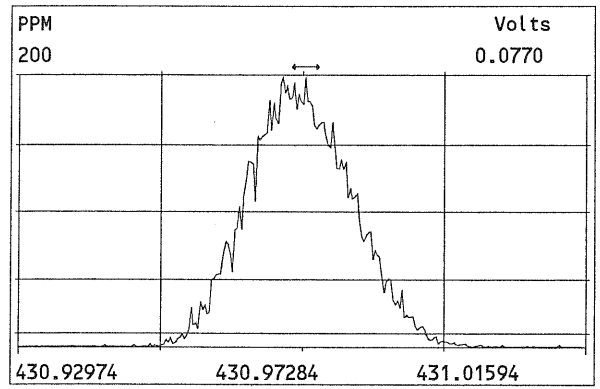


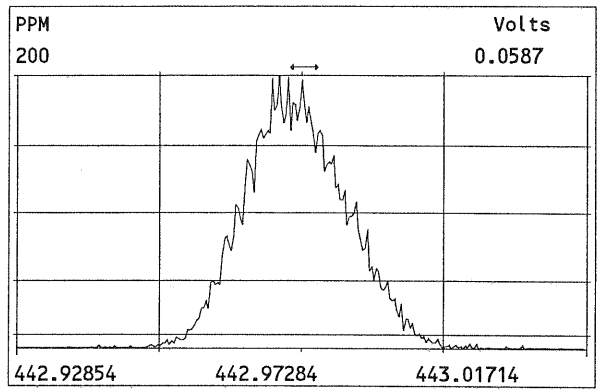


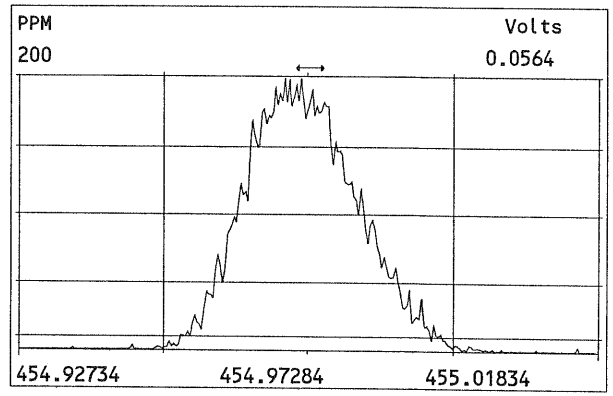


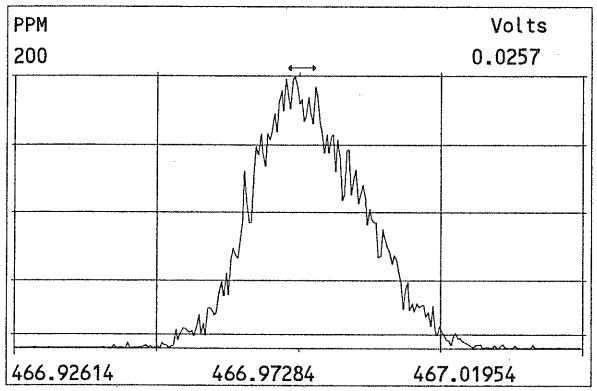


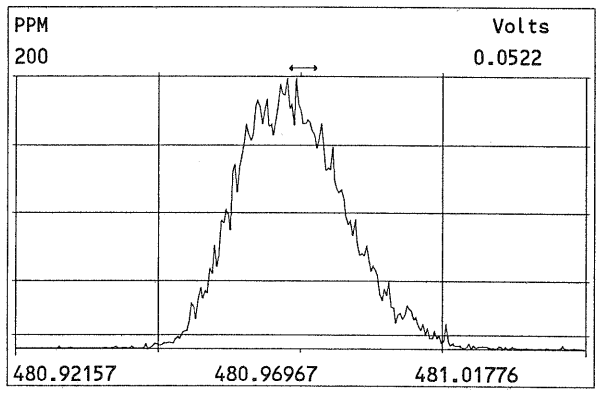
Peak Locate Examination:26-JUL-2006:10:20 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

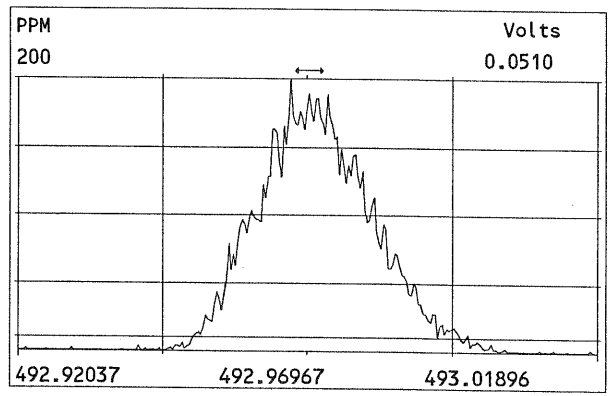


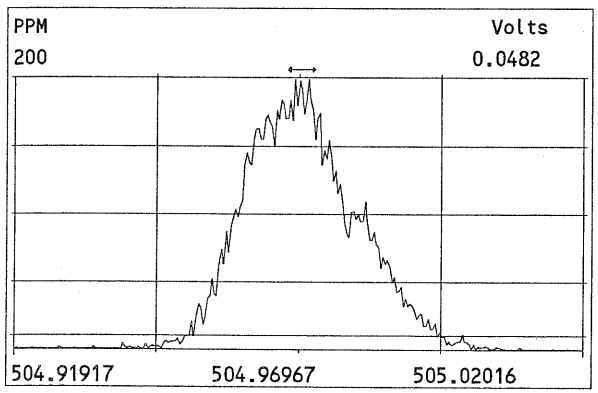


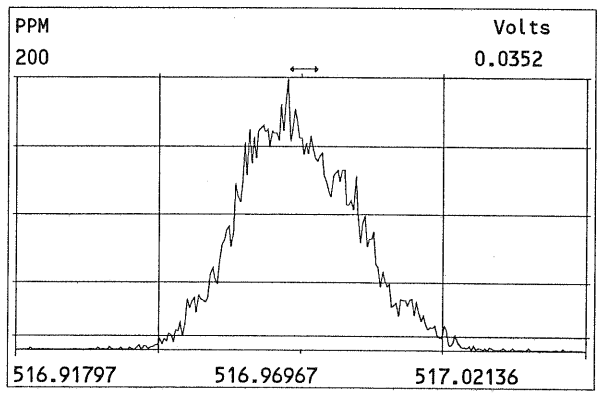












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: db5

VER Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 09:16:01

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.74	0.65-0.89	y	8.03	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	y	42.5	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	43.9	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	45.2	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	y	43.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	48.7	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	8.01	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	y	44.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.63	1.32-1.78	y	44.3	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	y	46.3	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	y	44.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	46.1	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.26	1.05-1.43	y	45.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	y	47.8	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	48.7	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	92.4	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: JK Date: 7/26/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: db5

VER Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 09:16:01

LABELED COMPOUNDS	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	93.7	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	y	80.9	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	98.2	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.34	1.05-1.43	y	94.2	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	94.6	72.0 - 138
13C-OCDD	M+2/M+4	0.86	0.76-1.02	y	204	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	97.4	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	82.2	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	y	83.1	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	85.8	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	85.8	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.49	0.43-0.59	y	88.4	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.47	0.43-0.59	y	90.0	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.41	0.37-0.51	y	84.1	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	90.3	77.0 - 129
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	191	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					7.81	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/24/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 Time: 09:16:01

DB-5 IS Data Filename: 25JUL06M Sam:21 Analysis Date: 26-JUL-06 Time: 09:16:01

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:25	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:15	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:47	1,2,3,8,9-PeCDF (L)	34:13
1,2,4,6,7,9-HxCDD (F)	36:07	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:11	1,2,3,7,8,9-HxCDF (L)	39:45
1,2,3,4,6,7,9-HpCDD (F)	42:47	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:09	1,2,3,4,7,8,9-HpCDF (L)	45:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)
<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/26/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 26-JUL-06 09:16:01 CS3 or VER Data Filename: 25JUL06M Sam:21

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.002	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.022	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.173	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.222	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [illegible] Date: 7/26/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 26-JUL-06 09:16:01 CS3 or VER Data Filename: 25JUL06M Sam:21

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.000	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.014	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.278	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/26/06

FAL ID: ST072506M3 Filename: 25JUL06M Sam:21 Acquired: 26-JUL-06 09:16:01 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072506M2 EndCal: ST072506M3
Results: 3956 GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 87.6
WHO 1998 Tox: 109

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	2.01e+06	0.74 y	27:25	1.10	8.03		2.50	-	*	
1,2,3,7,8-PeCDD	7.22e+06	1.61 y	33:12	0.90	42.5		2.50	-	*	
1,2,3,4,7,8-HxCDD	5.11e+06	1.29 y	38:34	0.96	43.9		2.50	-	*	
1,2,3,6,7,8-HxCDD	5.23e+06	1.28 y	38:44	0.83	45.2		2.50	-	*	
1,2,3,7,8,9-HxCDD	4.42e+06	1.23 y	39:11	0.77	43.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	5.19e+06	1.04 y	44:09	0.86	48.7		2.50	-	*	
OCDD	8.72e+06	0.90 y	49:41	0.87	101		2.50	-	*	
2,3,7,8-TCDF	2.35e+06	0.79 y	26:41	0.99	8.01		2.50	-	*	
1,2,3,7,8-PeCDF	9.39e+06	1.62 y	31:29	0.80	44.1		2.50	-	*	
2,3,4,7,8-PeCDF	9.85e+06	1.63 y	32:48	0.88	44.3		2.50	-	*	
1,2,3,4,7,8-HxCDF	6.63e+06	1.30 y	37:11	1.42	46.3		2.50	-	*	
1,2,3,6,7,8-HxCDF	6.19e+06	1.21 y	37:23	0.97	44.4		2.50	-	*	
2,3,4,6,7,8-HxCDF	6.20e+06	1.23 y	38:20	1.26	46.1		2.50	-	*	
1,2,3,7,8,9-HxCDF	7.33e+06	1.26 y	39:45	1.34	45.5		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	6.07e+06	1.02 y	42:15	1.28	47.8		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	5.11e+06	1.03 y	45:03	1.22	48.7		2.50	-	*	
OCDF	8.87e+06	0.90 y	50:03	0.90	92.4		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	2.27e+07	0.77 y	27:24	1.00	93.7					93.7
13C-1,2,3,7,8-PeCDD	1.88e+07	1.61 y	33:12	0.96	80.9					80.9
13C-1,2,3,4,7,8-HxCDD	1.21e+07	1.29 y	38:32	0.90	98.2					98.2
13C-1,2,3,6,7,8-HxCDD	1.40e+07	1.34 y	38:42	1.09	94.2					94.2
13C-1,2,3,4,6,7,8-HpCDD	1.24e+07	1.04 y	44:08	0.96	94.6					94.6
13C-OCDD	1.99e+07	0.86 y	49:39	0.71	204					102
13C-2,3,7,8-TCDF	2.96e+07	0.76 y	26:38	0.94	97.4					97.4
13C-1,2,3,7,8-PeCDF	2.66e+07	1.61 y	31:28	1.00	82.2					82.2
13C-2,3,4,7,8-PeCDF	2.54e+07	1.61 y	32:47	0.94	83.1					83.1
13C-1,2,3,4,7,8-HxCDF	1.01e+07	0.51 y	37:09	0.86	85.8					85.8
13C-1,2,3,6,7,8-HxCDF	1.44e+07	0.49 y	37:22	1.23	85.8					85.8
13C-2,3,4,6,7,8-HxCDF	1.07e+07	0.49 y	38:18	0.88	88.4					88.4
13C-1,2,3,7,8,9-HxCDF	1.21e+07	0.47 y	39:43	0.98	90.0					90.0
13C-1,2,3,4,6,7,8-HpCDF	9.91e+06	0.41 y	42:15	0.86	84.1					84.1
13C-1,2,3,4,7,8,9-HpCDF	8.62e+06	0.42 y	45:03	0.70	90.3					90.3
13C-OCDF	2.14e+07	0.89 y	50:02	0.82	191					95.6
37Cl-2,3,7,8-TCDD	1.54e+06		27:25	0.81	7.81					78.1
13C-1,2,3,4-TCDD	2.43e+07	0.80 y	26:49	-	12.7					
13C-1,2,3,4-TCDF	3.24e+07	0.75 y	25:34	-	11.3					
13C-1,2,3,7,8,9-HxCDD	1.37e+07	1.29 y	39:09	-	9.15					
							Fac	Noise	DL	#Hom	
Total Tetra-Dioxins	7.89e+06		22:50	1.10	31.6		2.50	-	*	12	
Total Penta-Dioxins	1.93e+07		29:50	0.90	114		2.50	-	*	28	
Total Hexa-Dioxins	2.19e+07		35:11	0.85	197		2.50	-	*	30	
Total Hepta-Dioxins	1.17e+07		41:08	0.86	110		2.50	-	*	49	
Total Tetra-Furans	8.35e+06		23:04	0.99	28.4		2.50	-	*	18	
1st Fn. Tot Penta-Furans	1.22e+07		27:12	0.84	56.2		2.50	-	*	4	PeCDF
Total Penta-Furans	2.68e+07		29:41	0.84	123		2.50	-	*	29	179
Total Hexa-Furans	3.52e+07		35:14	1.22	243		2.50	-	*	33	
Total Hepta-Furans	3.40e+07		41:15	1.25	293		2.50	-	*	37	

Analyst: TK Date: 7/26/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:25JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

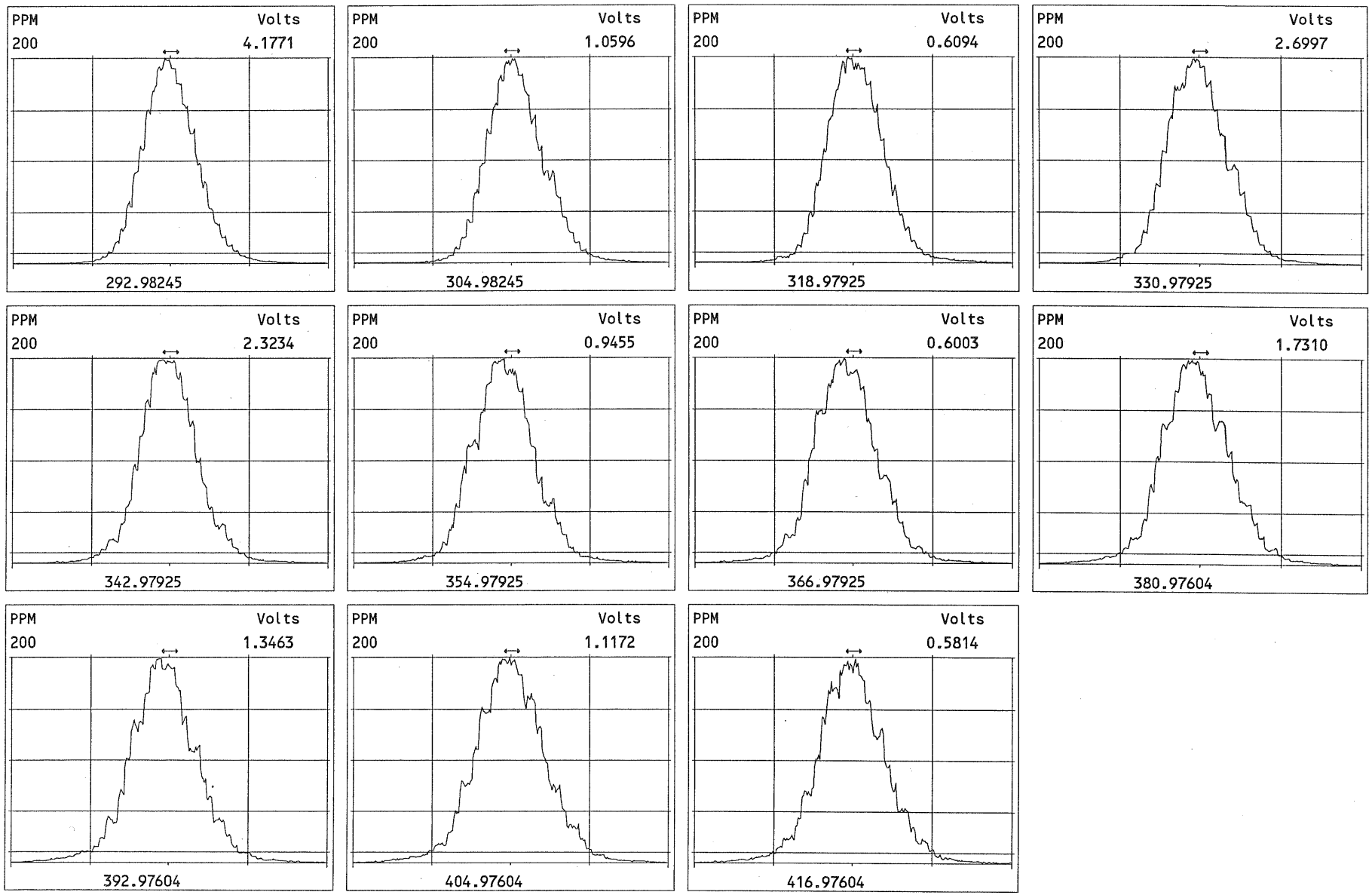
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
25JUL06M	1	ST072506M1	1613 CS3 (051212J)	25-JUL-06 14:41:35	ST072506M1	ST072506M2	DV
25JUL06M	2	3969-006-0001-SA	E2-B4-EP162-182	25-JUL-06 15:44:16	ST072506M1	ST072506M2	DV
25JUL06M	3	3969-009-0001-SA	E1-B1-EP85-164	25-JUL-06 16:39:41	ST072506M1	ST072506M2	DV
25JUL06M	4	SB072506M1	Solvent Blank	25-JUL-06 17:35:04	ST072506M1	ST072506M2	DV
25JUL06M	5	0913-001-0001-OPR	OPR	25-JUL-06 18:30:25	ST072506M1	ST072506M2	DV
25JUL06M	6	0913-001-0001-MB	Method Blank	25-JUL-06 19:25:45	ST072506M1	ST072506M2	DV
25JUL06M	7	3969-004-X002-SA	E8-162-T-C7@15	25-JUL-06 20:21:04	ST072506M1	ST072506M2	DV
25JUL06M	8	3969-002-X002-SA	E3-A4-EP168-181	25-JUL-06 21:16:24	ST072506M1	ST072506M2	DV
25JUL06M	9	SB072506M2	Solvent Blank	25-JUL-06 22:11:47	ST072506M1	ST072506M2	DV
25JUL06M	10	ST072506M2	1613 CS3 (051212J)	25-JUL-06 23:07:06	ST072506M1	ST072506M2	DV
25JUL06M	11	3956-001-0001-SA	IG7-S1	26-JUL-06 00:02:34	ST072506M2	ST072506M3	DV
25JUL06M	12	3963-001-0001-SA	061409-08	26-JUL-06 00:58:02	ST072506M2	ST072506M3	DV
25JUL06M	13	3963-002-0001-SA	061409-09	26-JUL-06 01:53:21	ST072506M2	ST072506M3	DV
25JUL06M	14	3963-003-0001-SA	061409-10	26-JUL-06 02:48:37	ST072506M2	ST072506M3	DV
25JUL06M	15	3967-001-0001-SA	C-4, S-1	26-JUL-06 03:43:56	ST072506M2	ST072506M3	DV
25JUL06M	16	3968-001-0001-SA	STC-1	26-JUL-06 04:39:22	ST072506M2	ST072506M3	DV
25JUL06M	17	3968-002-0001-SA	STC-2	26-JUL-06 05:34:41	ST072506M2	ST072506M3	DV
25JUL06M	18	3968-003-0001-SA	STC-3	26-JUL-06 06:30:01	ST072506M2	ST072506M3	DV
25JUL06M	19	3968-004-0001-SA	STC-4	26-JUL-06 07:25:21	ST072506M2	ST072506M3	DV
25JUL06M	20	SB072506M3	Solvent Blank	26-JUL-06 08:20:42	ST072506M2	ST072506M3	DV
25JUL06M	21	ST072506M3	1613 CS3 (051212J)	26-JUL-06 09:16:01	ST072506M2	ST072506M3	DV

7/26/06

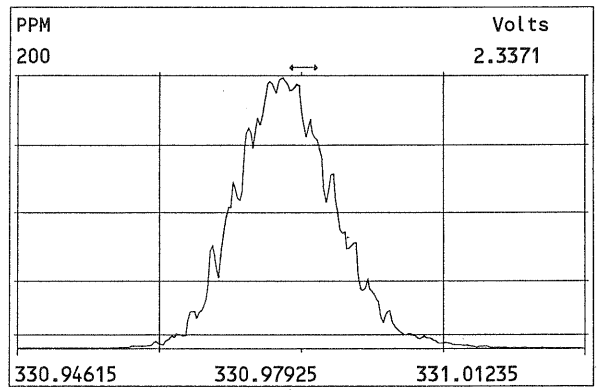
Data Backed Up:_____

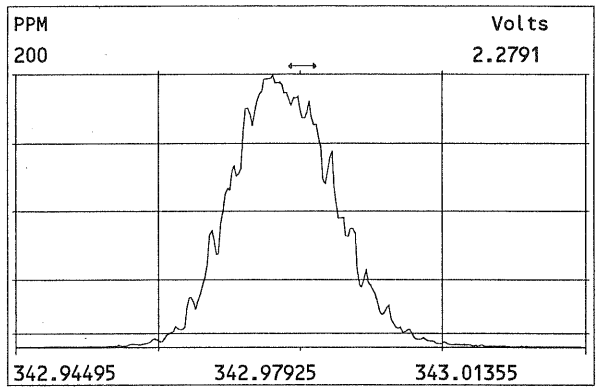
Date:_____

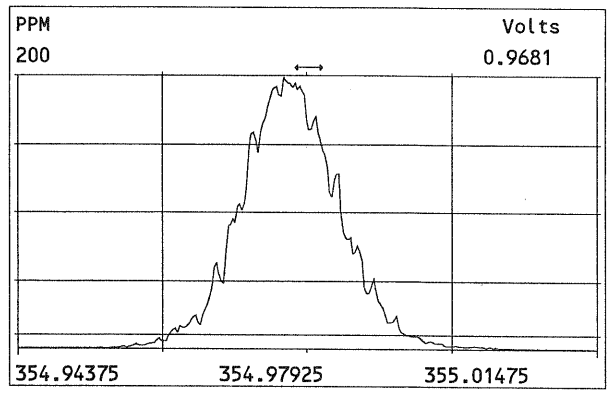
Peak Locate Examination:25-JUL-2006:14:39 File:25JUL06M
Experiment:PCDD Function:1 Reference:PFK

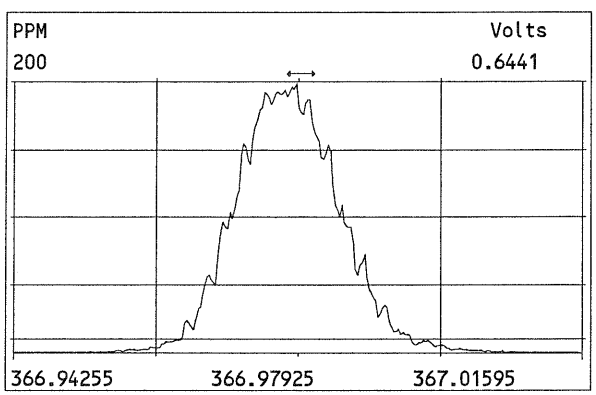


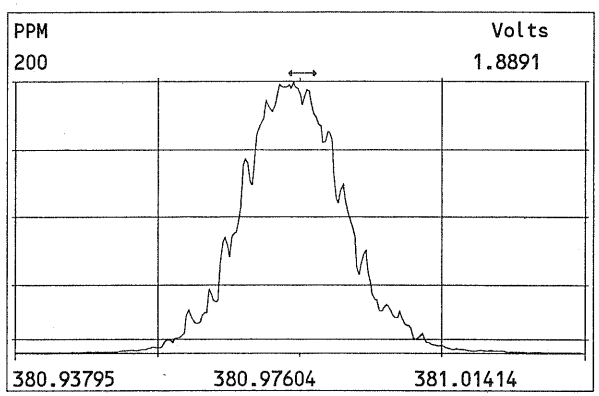
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:2 Reference:PFK

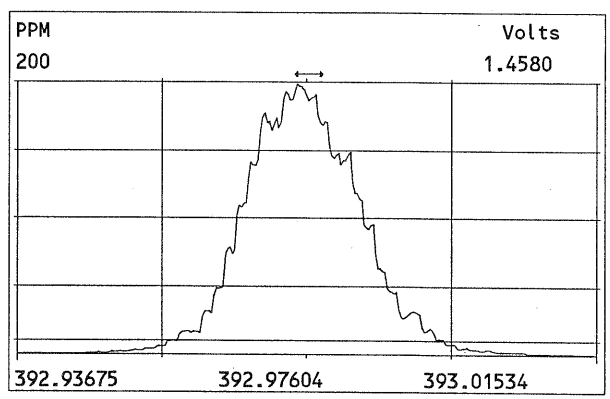


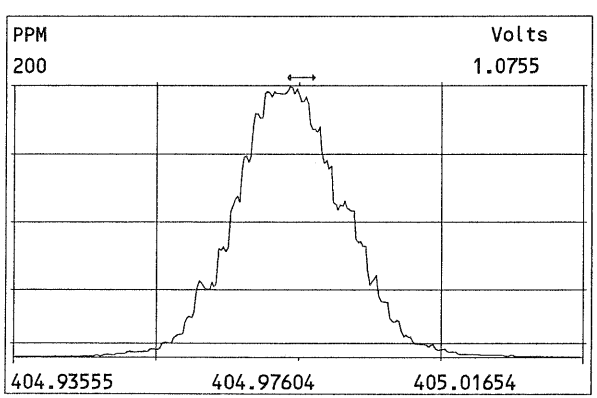


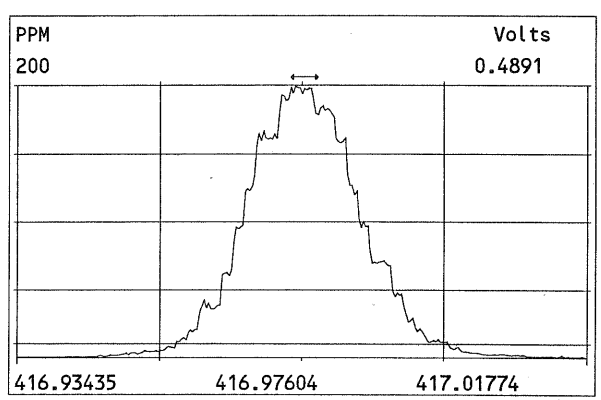




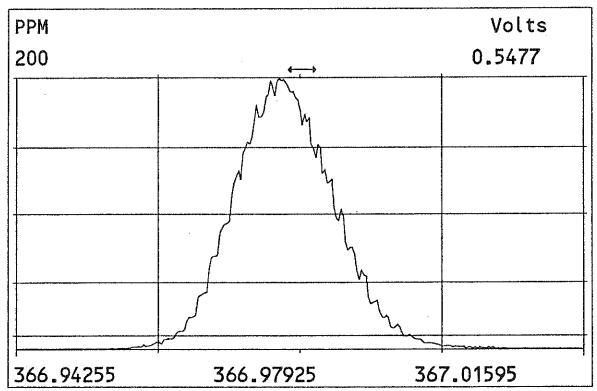


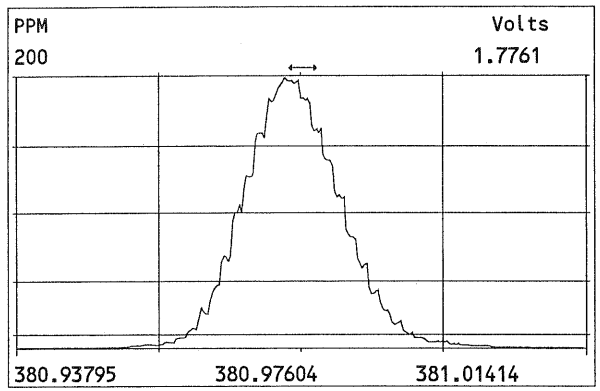


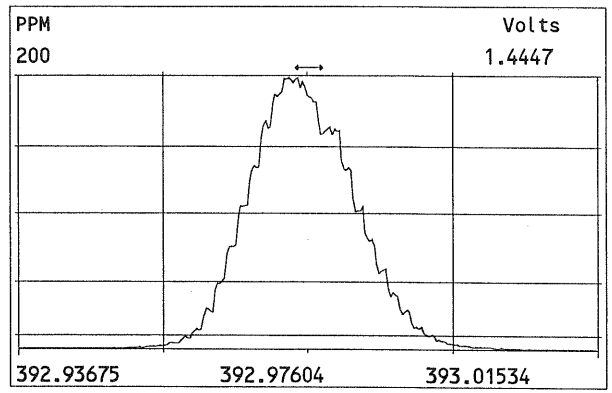


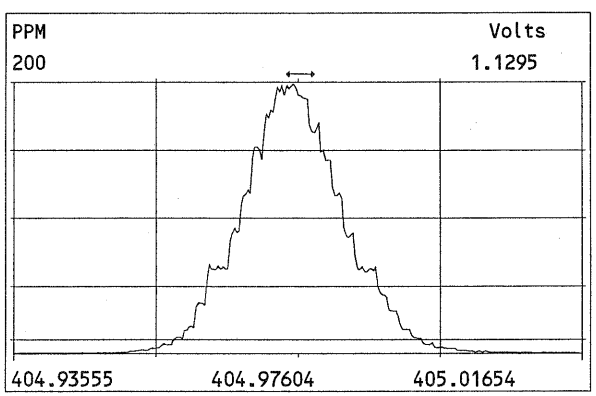


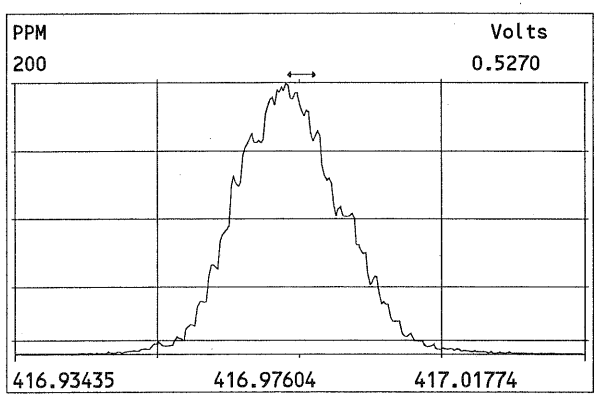
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:3 Reference:PFK

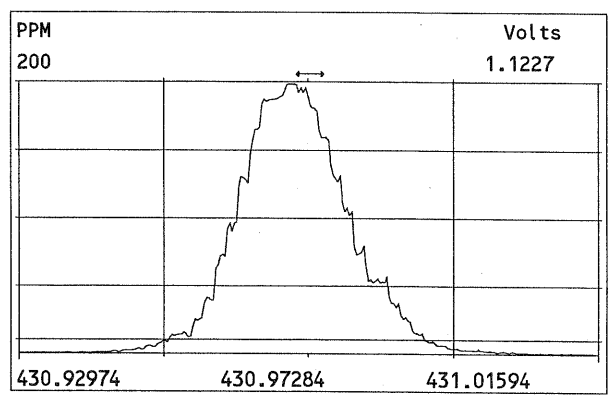


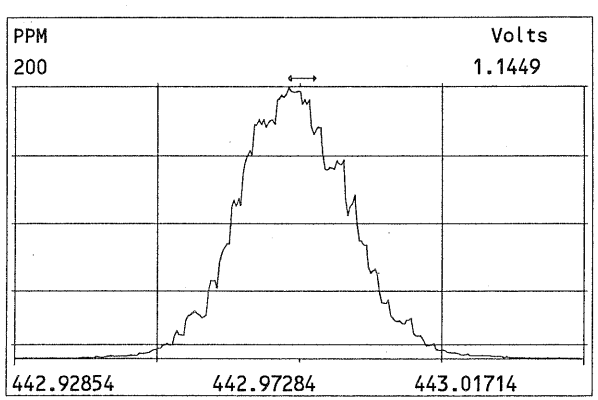


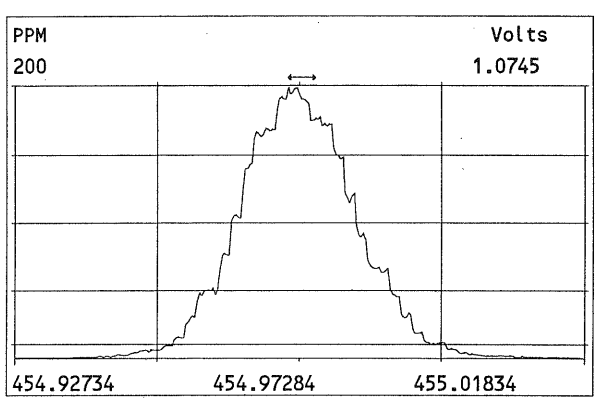




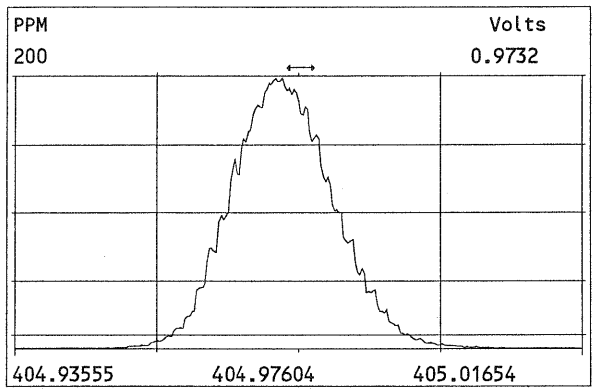


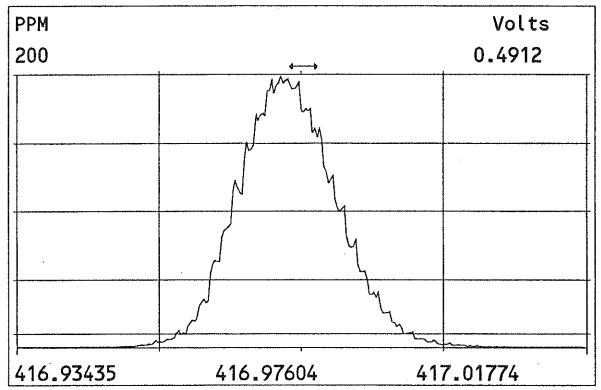


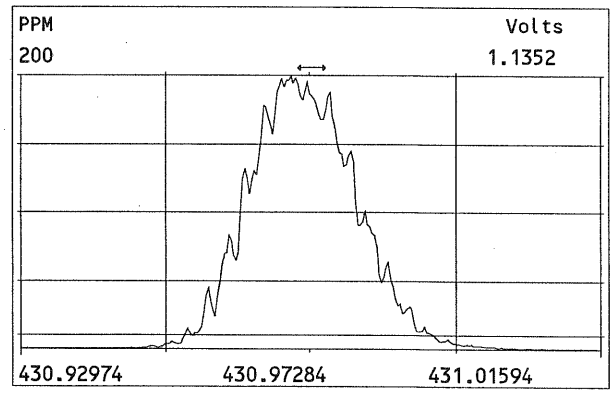


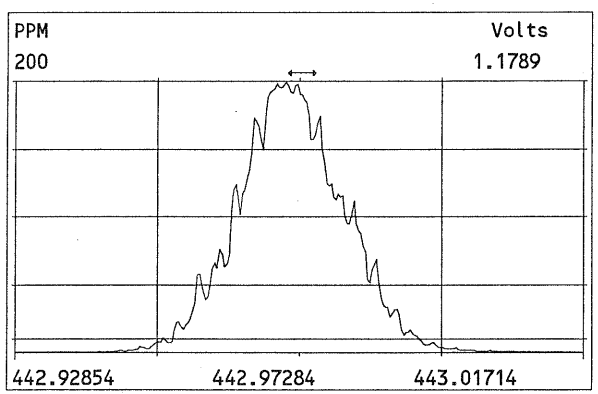


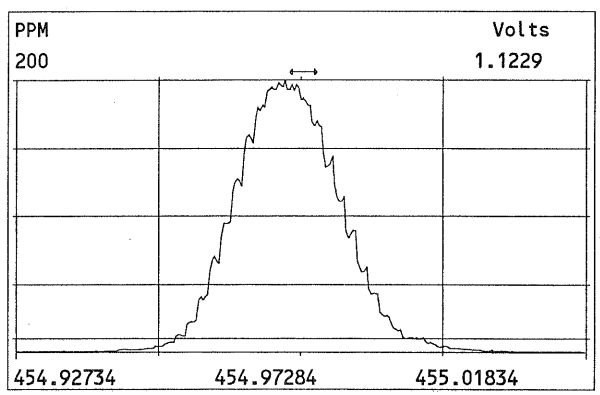
Peak Locate Examination:25-JUL-2006:14:40 File:25JUL06M
Experiment:PCDD Function:4 Reference:PFK

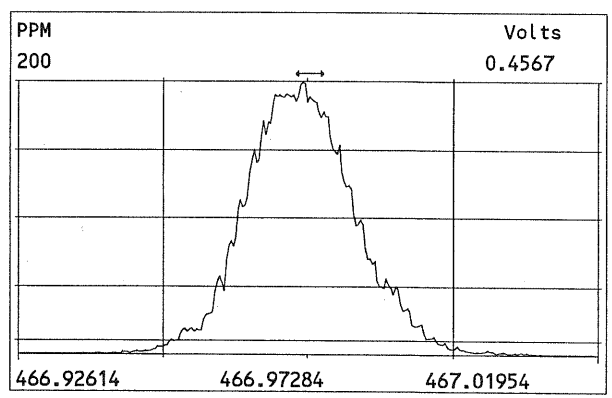


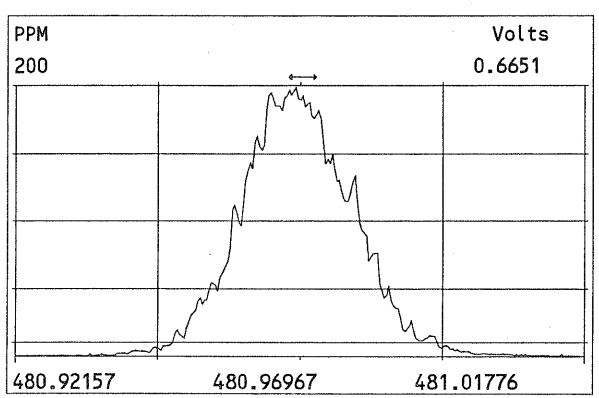




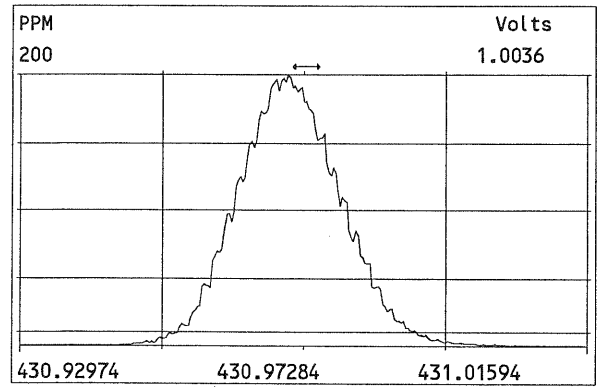


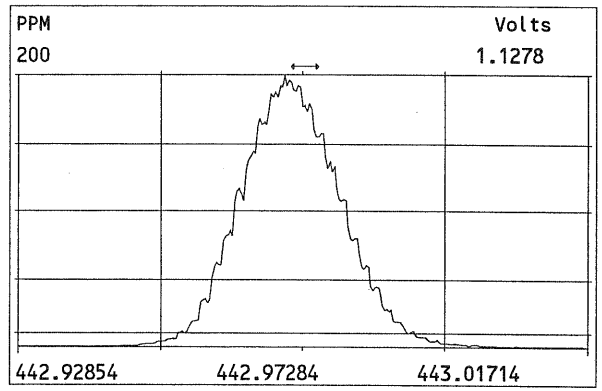


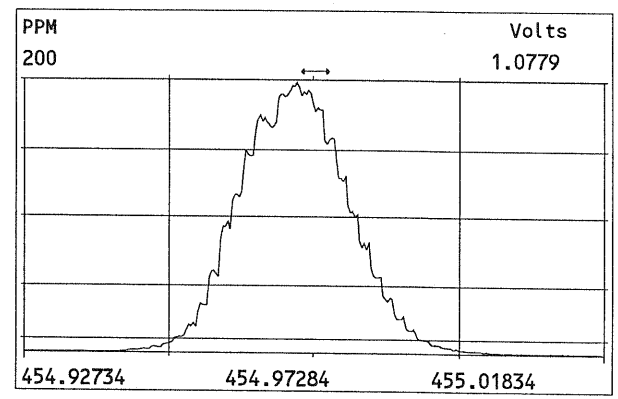


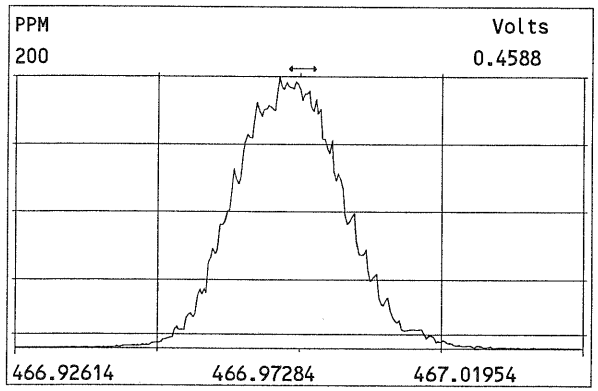


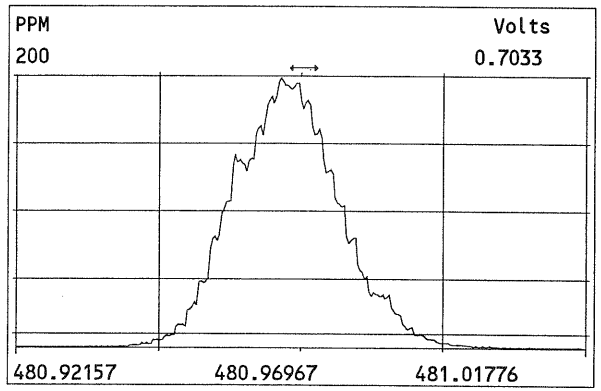
Peak Locate Examination:25-JUL-2006:14:41 File:25JUL06M
Experiment:PCDD Function:5 Reference:PFK

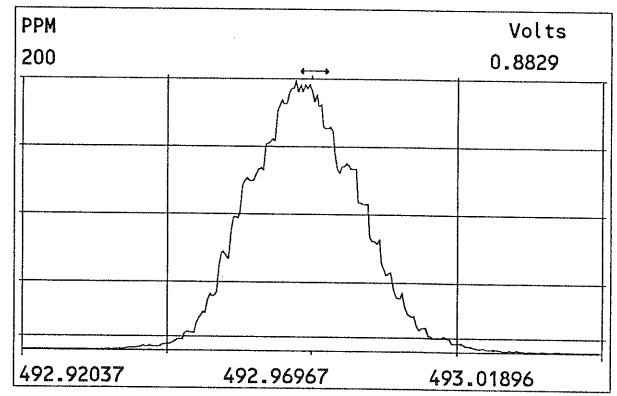


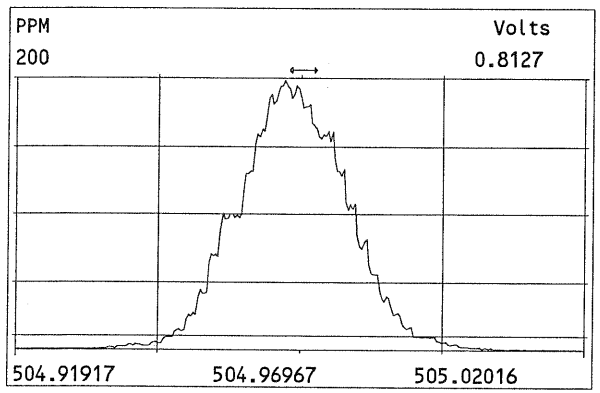


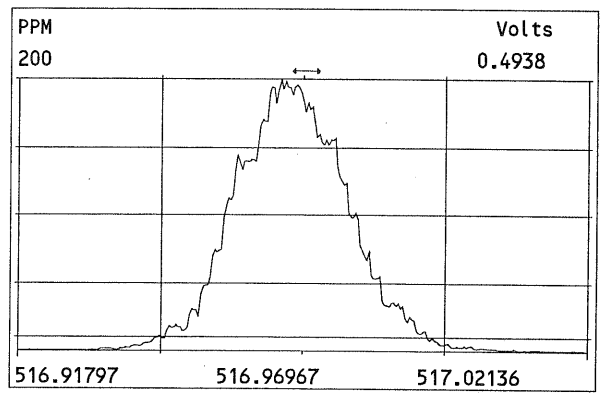












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319.8965 S:21 Exp:PCDD
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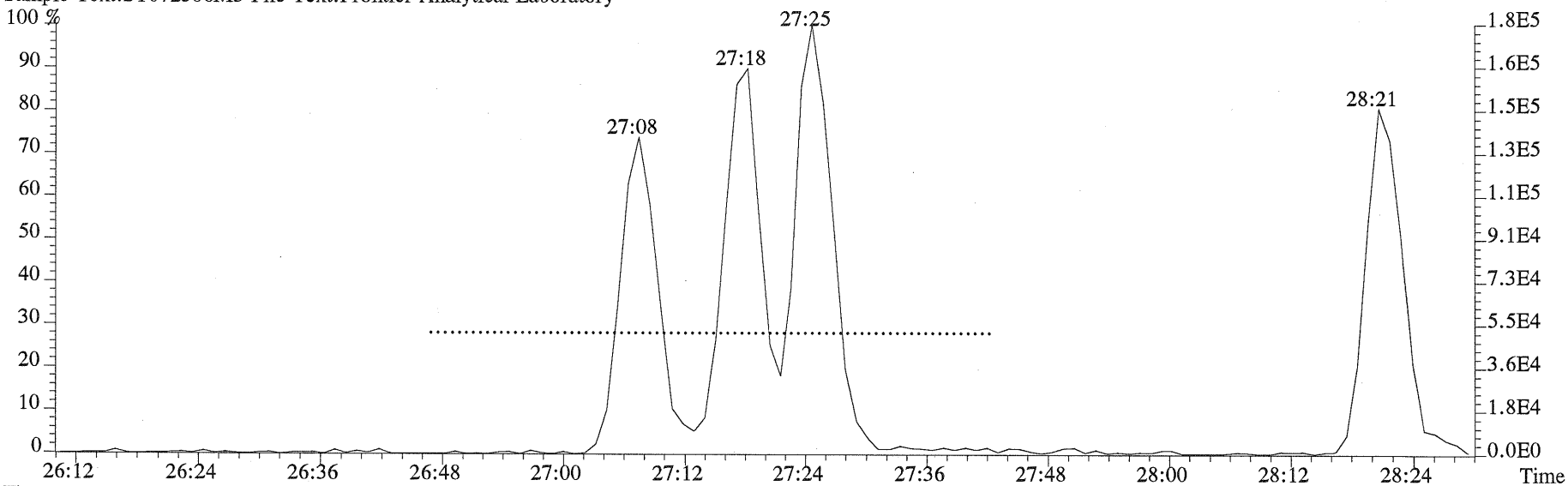

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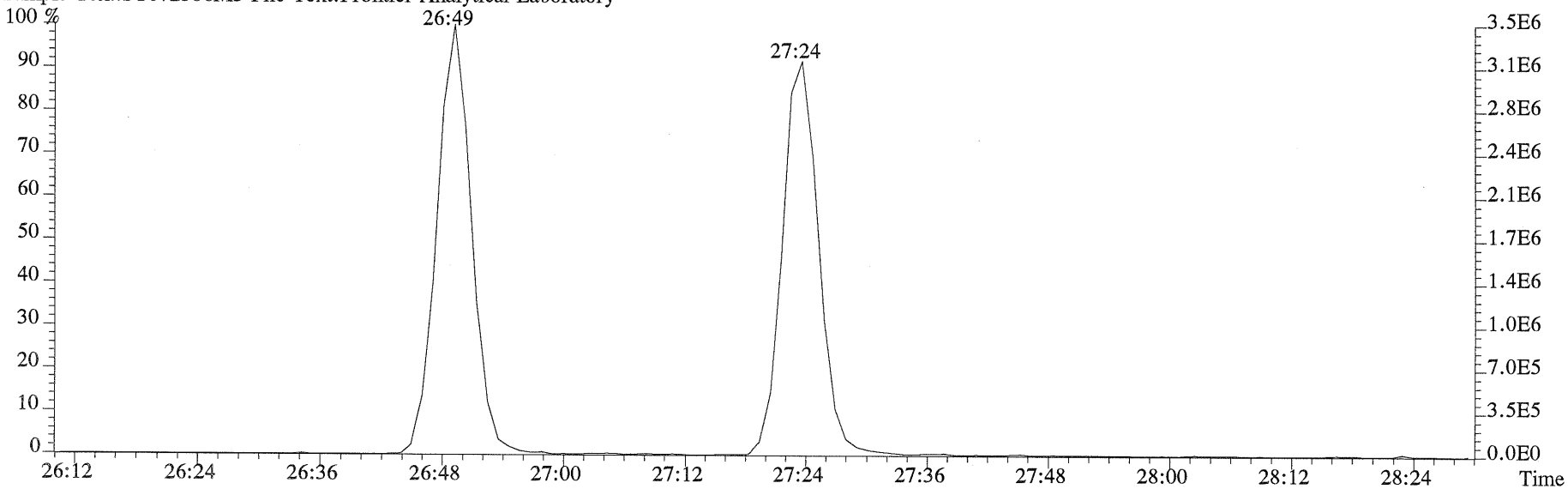

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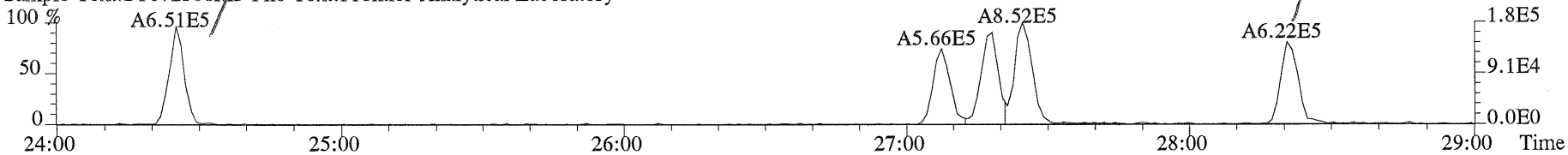
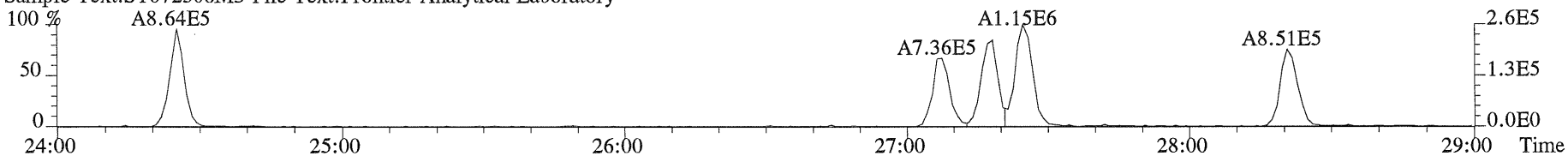
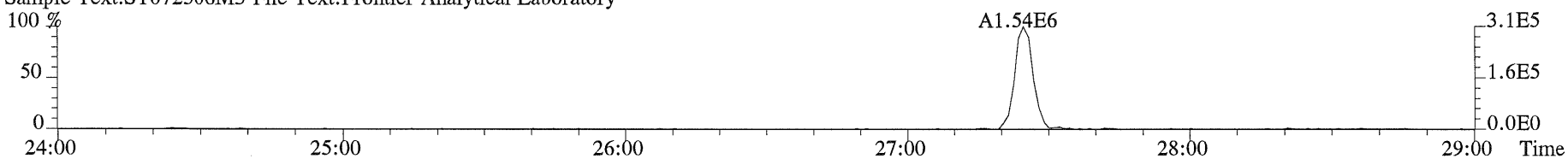
319.8965 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



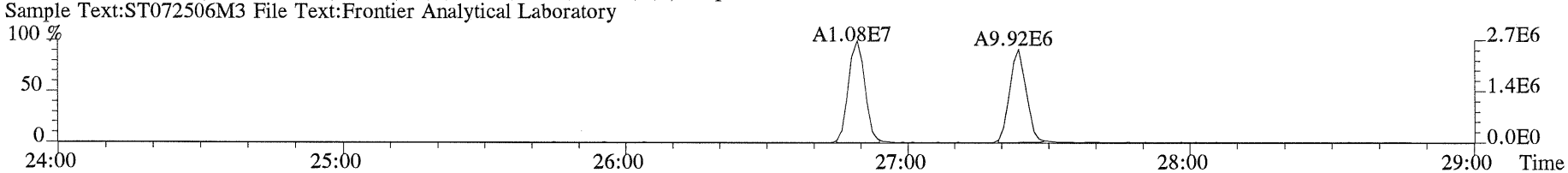
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



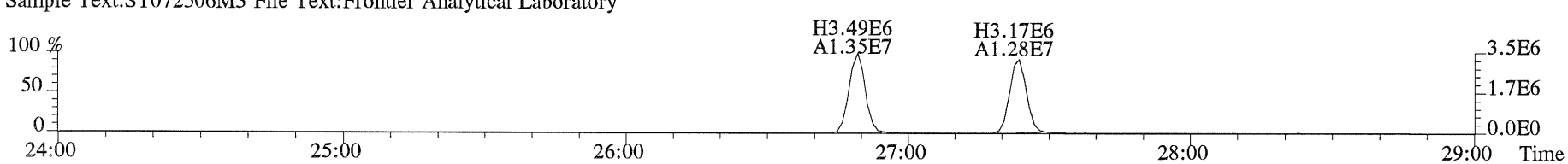
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

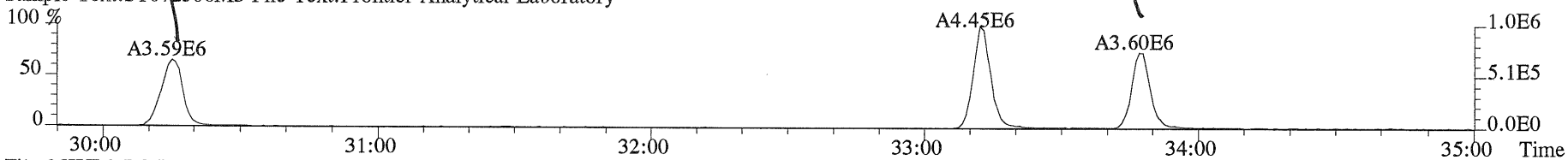


File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

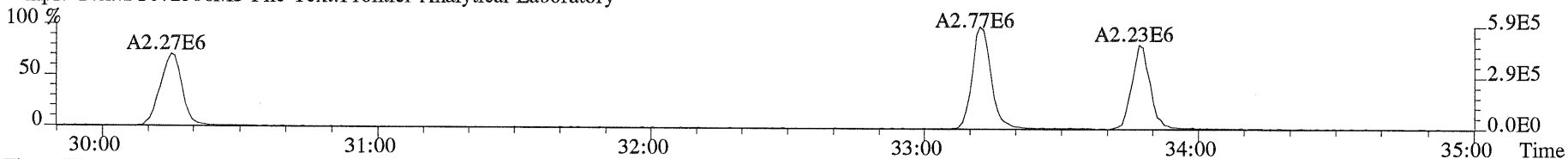


653

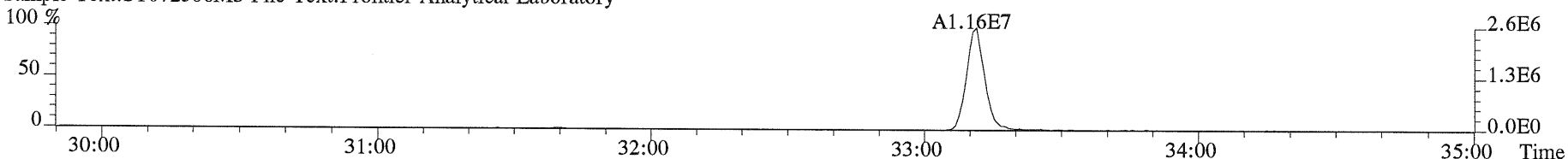
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



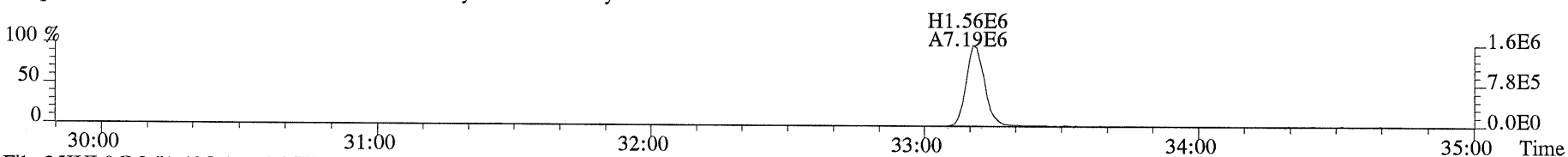
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



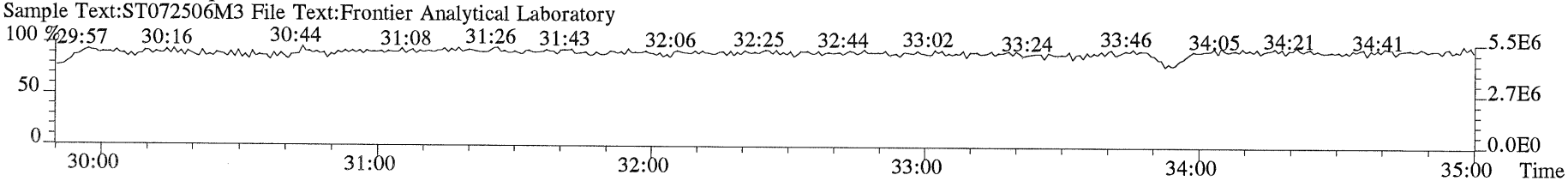
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:21 F:2 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



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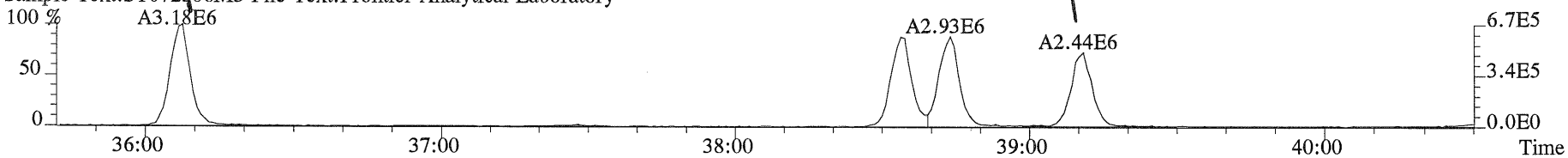
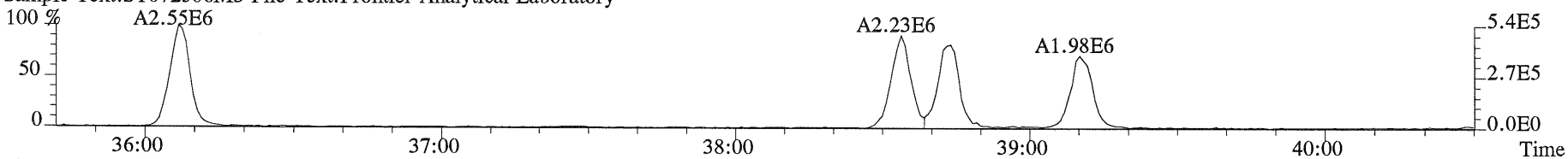
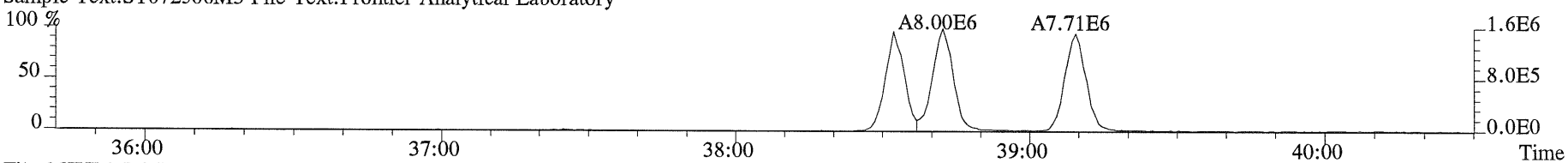
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



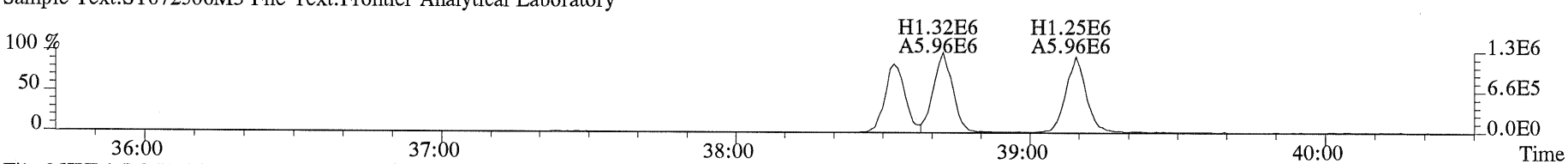
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



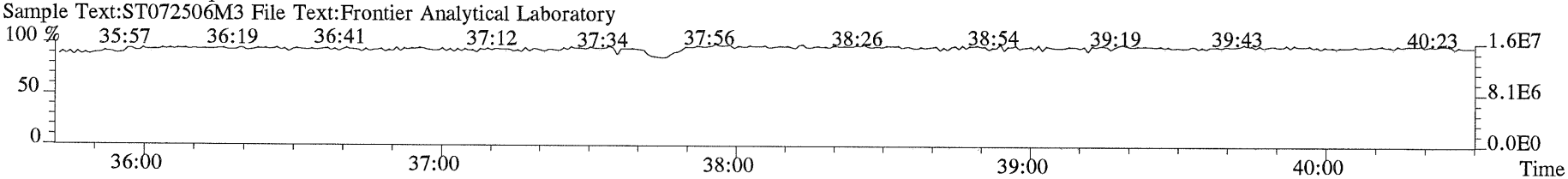
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



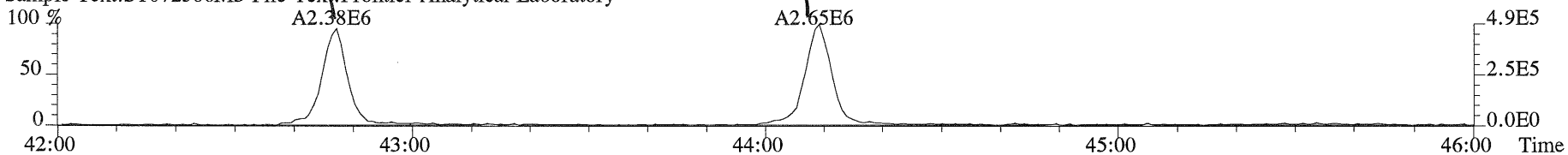
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



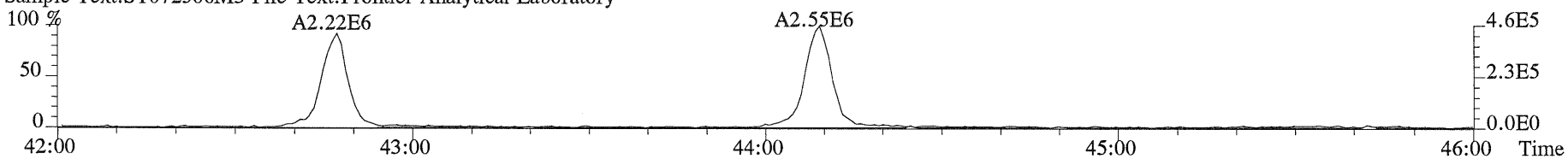
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:21 F:3 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



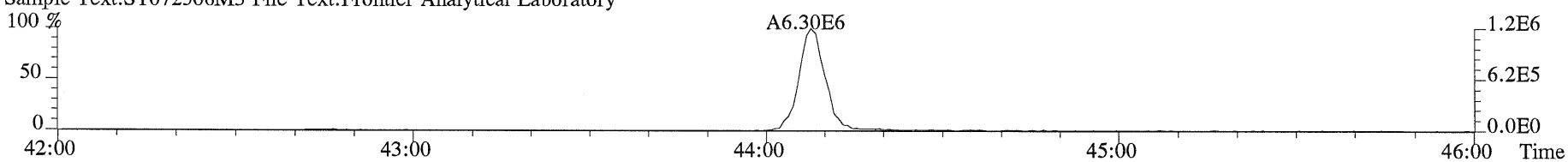
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



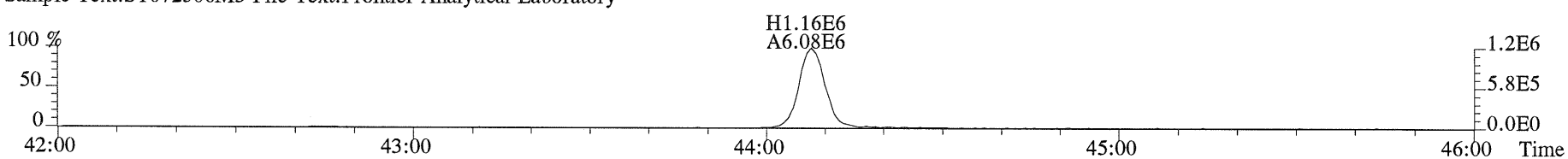
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



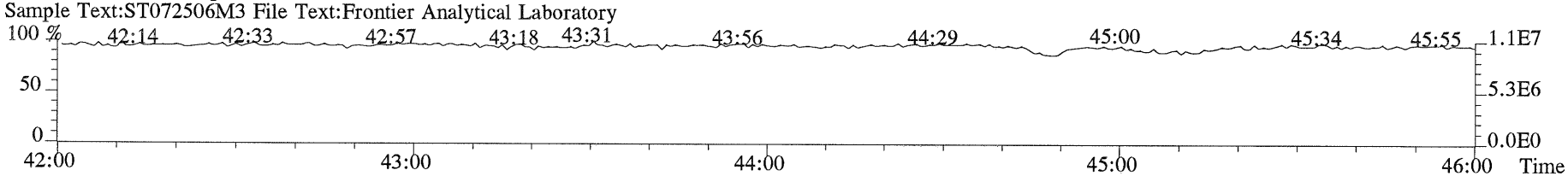
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



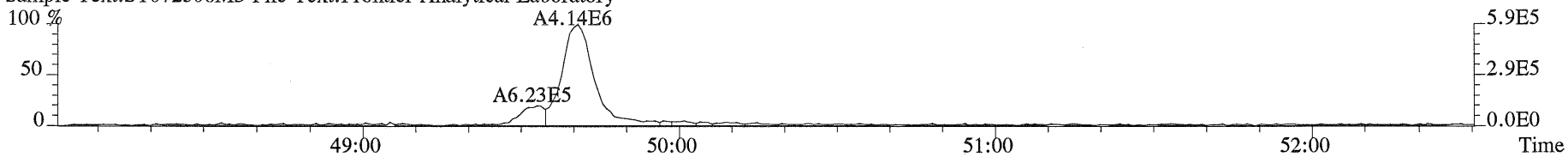
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



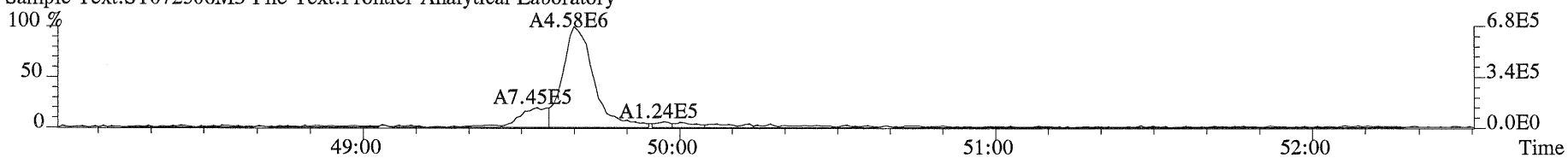
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:21 F:4 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



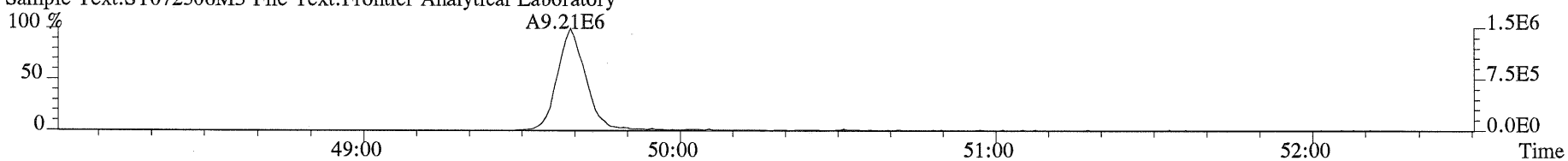
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

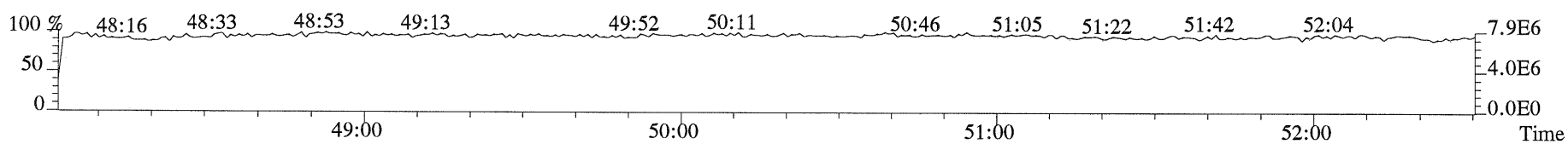


File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

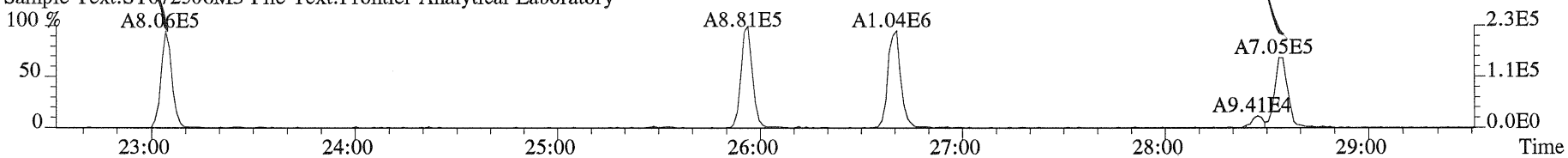


File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

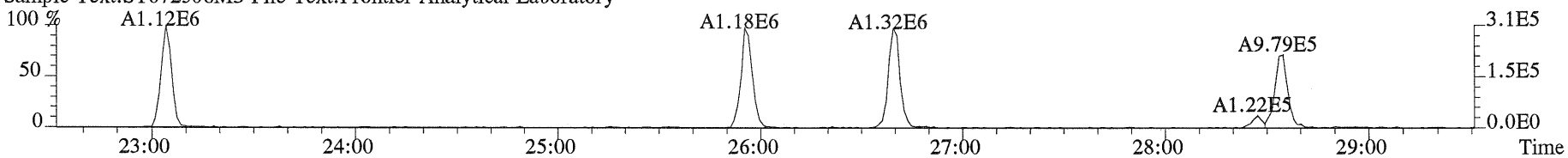
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:21 F:5 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



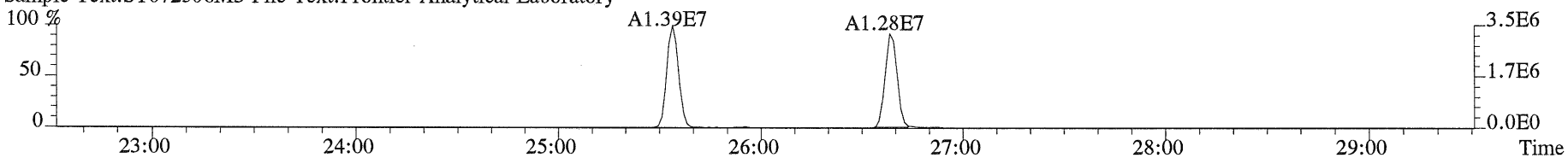
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



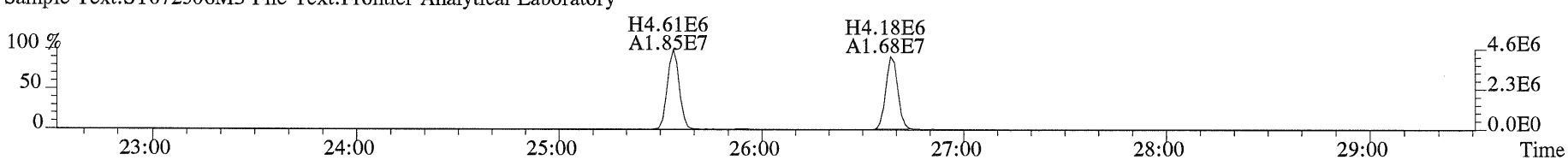
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:21 BSUB(10000,15,-3.0) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



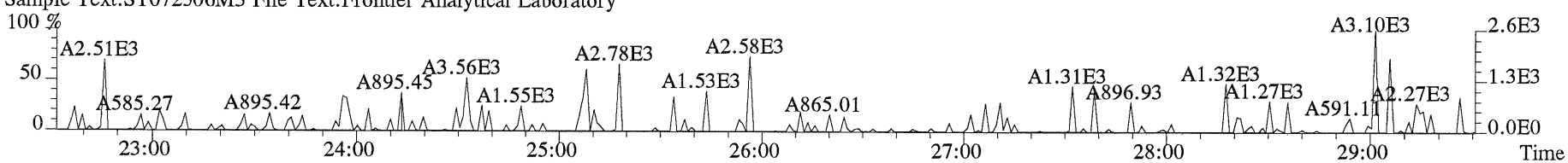
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



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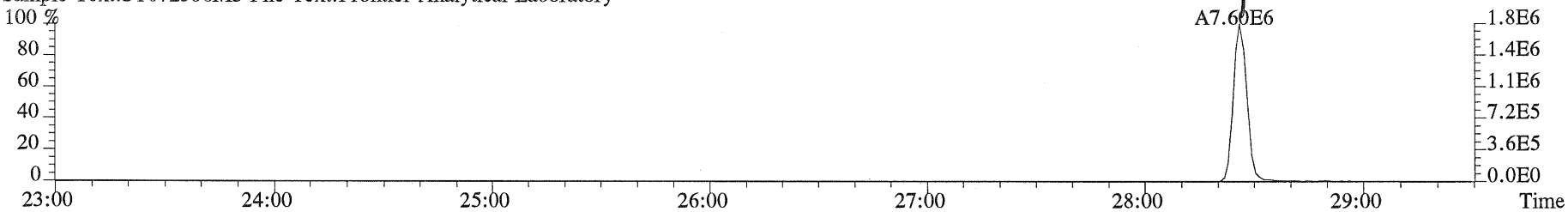
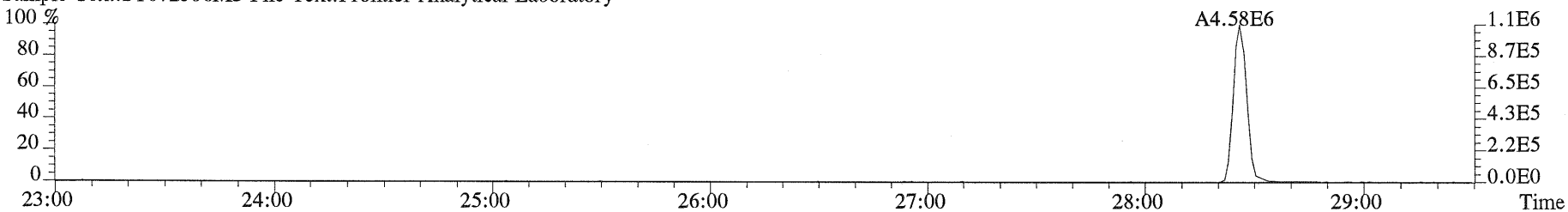
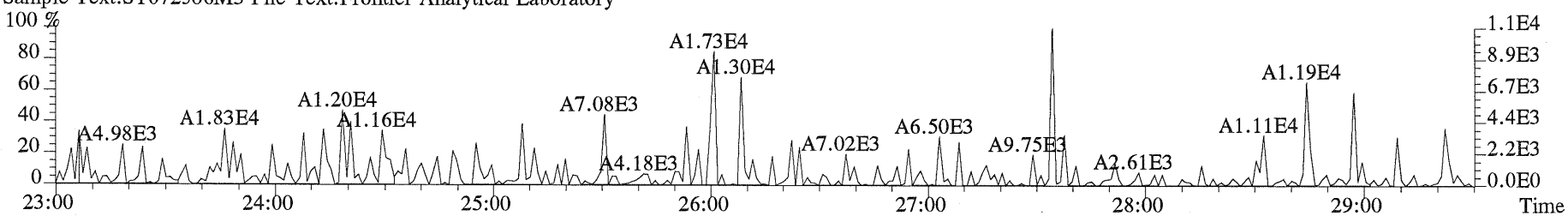
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



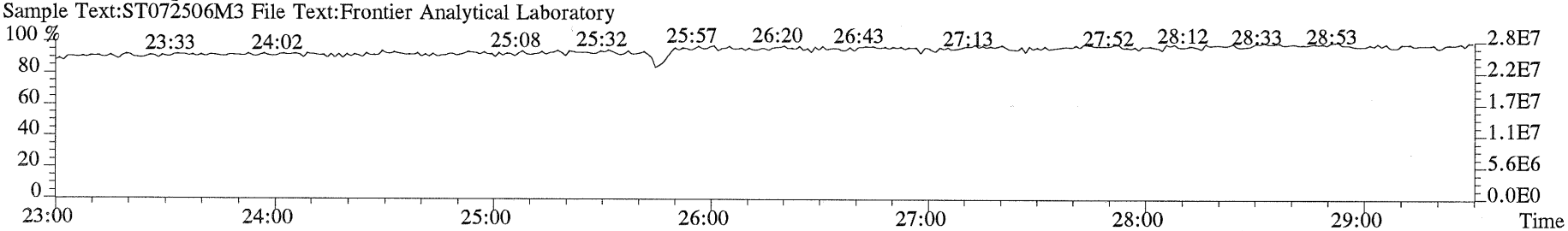
File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:21 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



File:25JUL06M #1-390 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:21 Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



Klamath River Sediment Study

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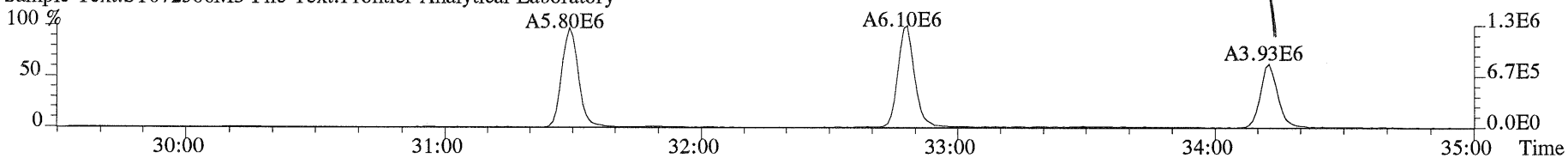
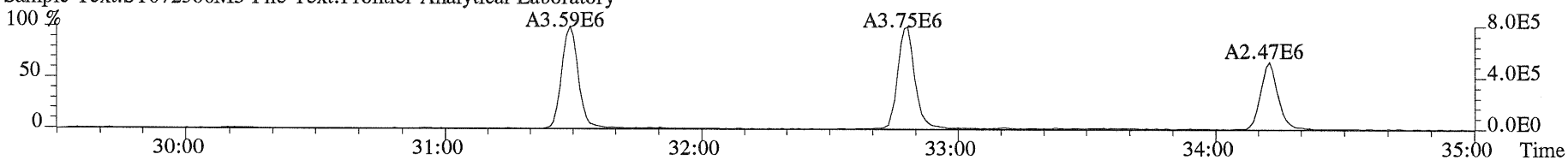
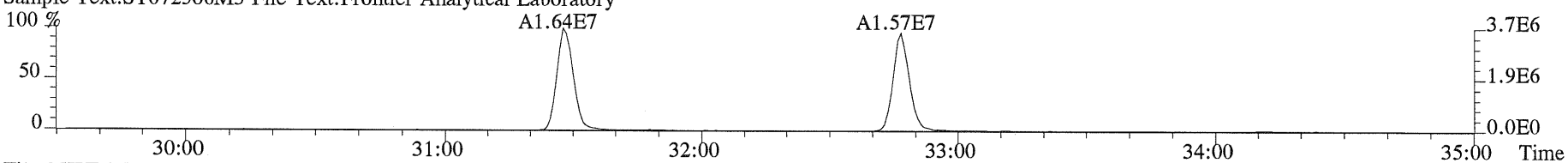
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



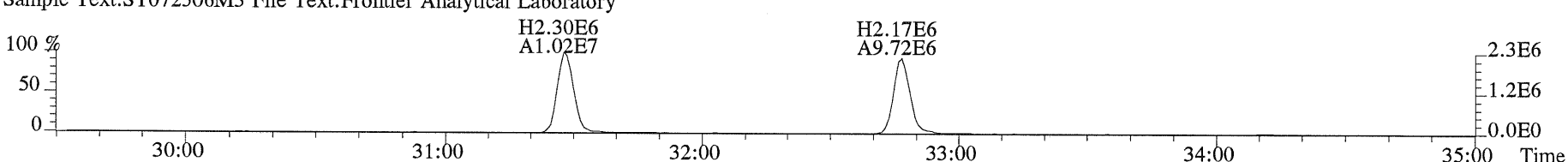
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



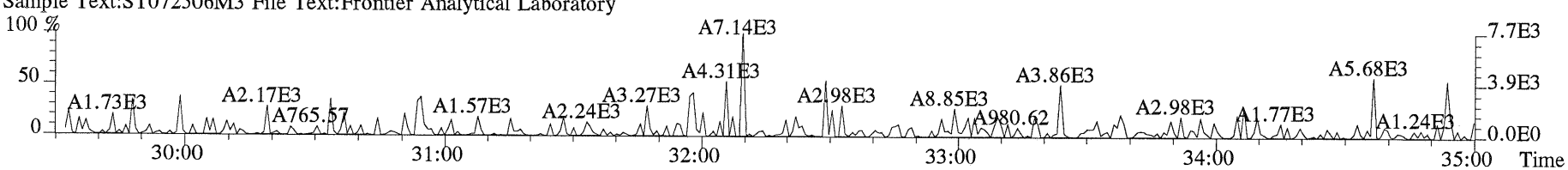
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



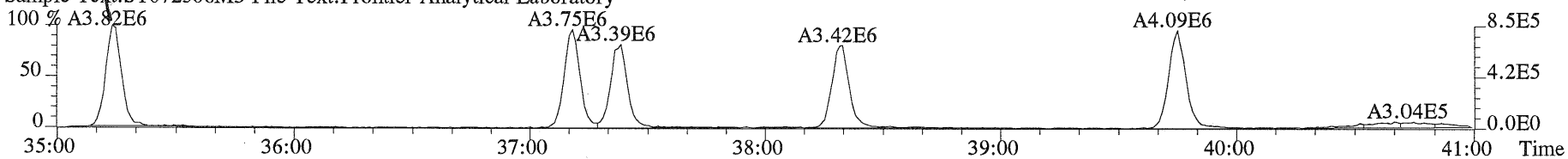
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



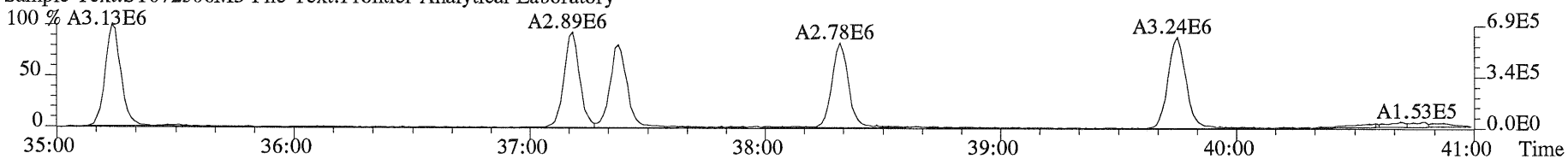
File:25JUL06M #1-425 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:21 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



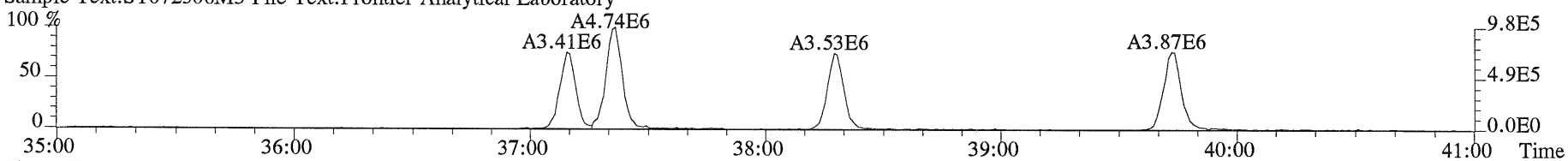
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



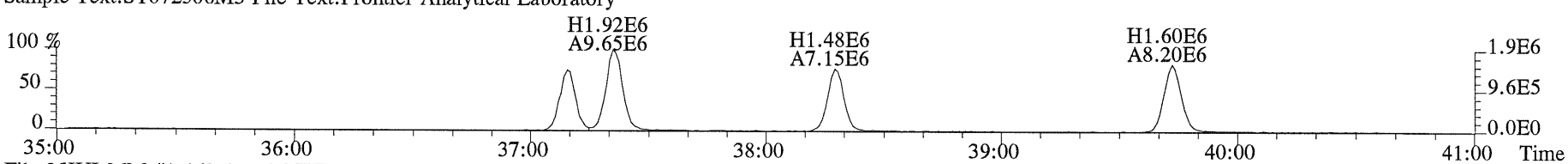
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



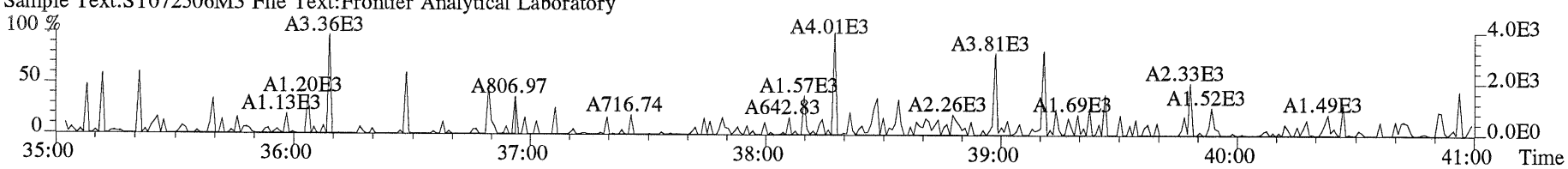
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



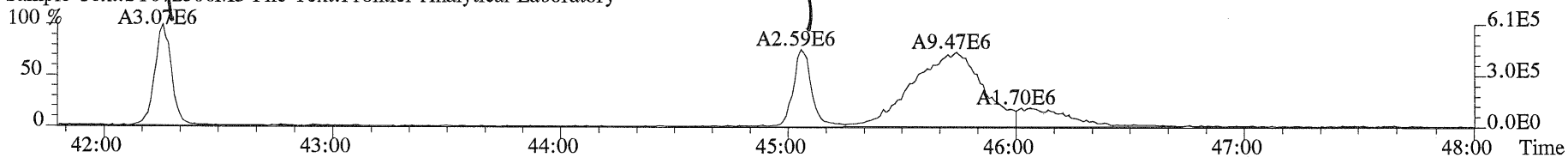
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



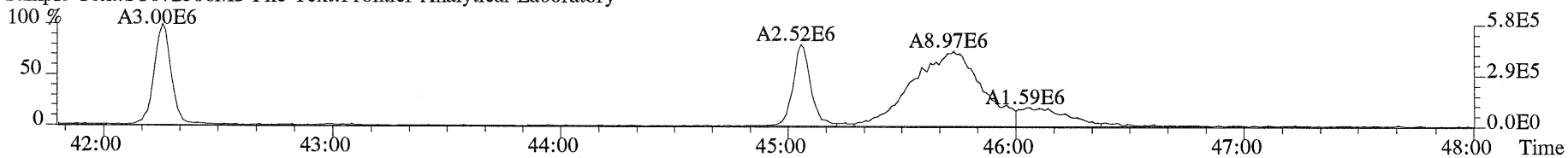
File:25JUL06M #1-463 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:21 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



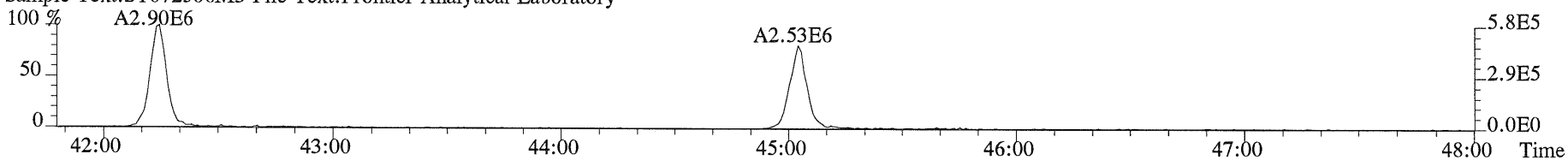
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



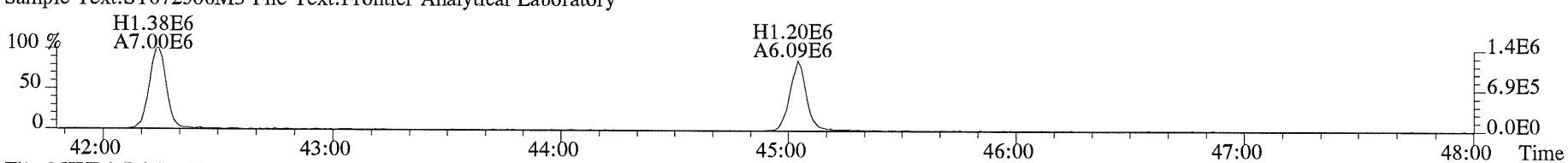
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



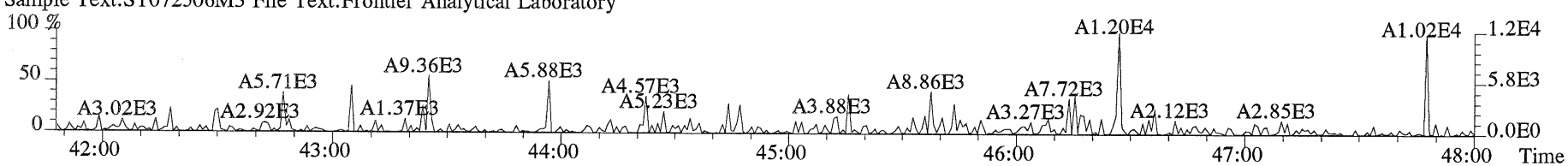
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



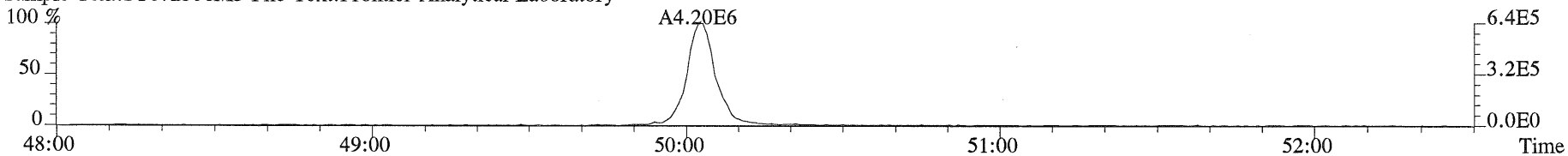
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



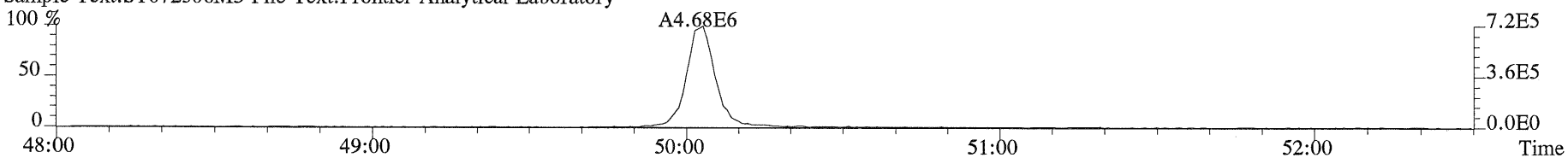
File:25JUL06M #1-542 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:21 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



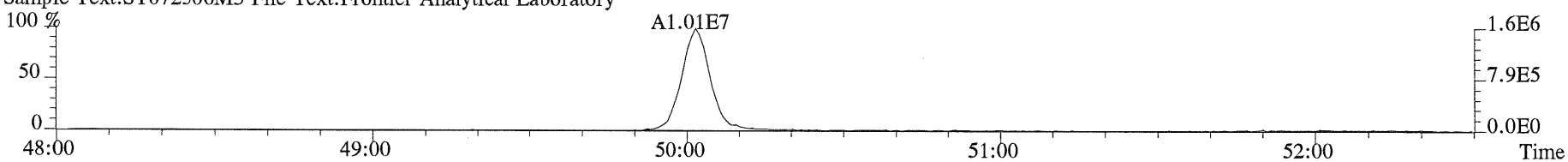
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



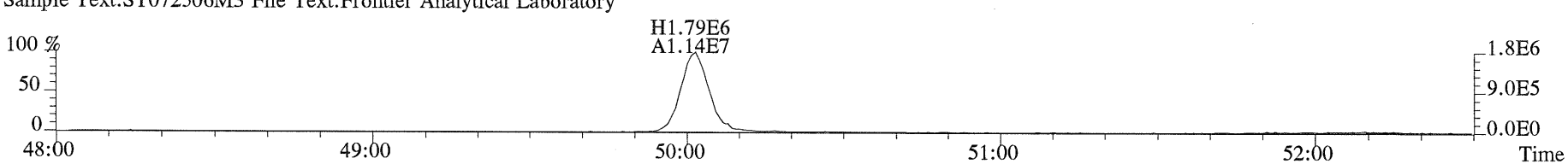
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



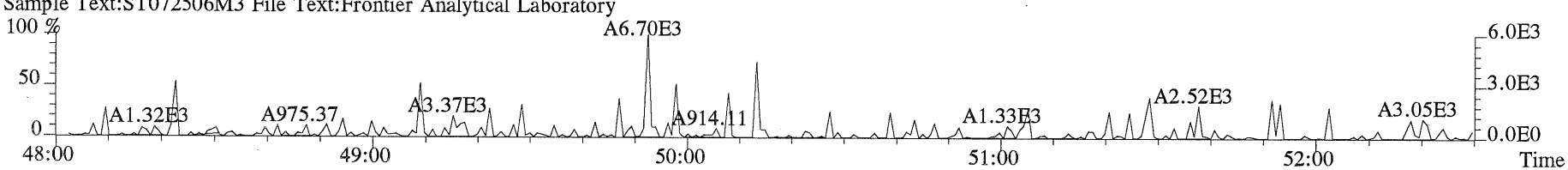
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory



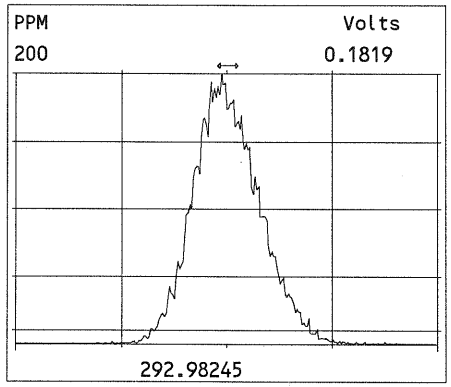
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

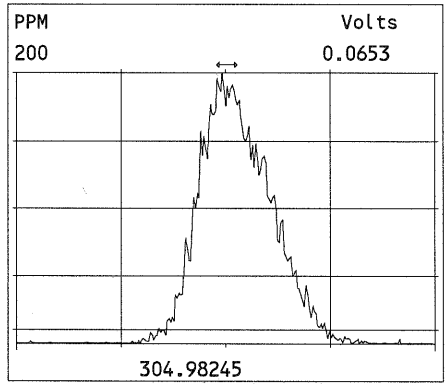


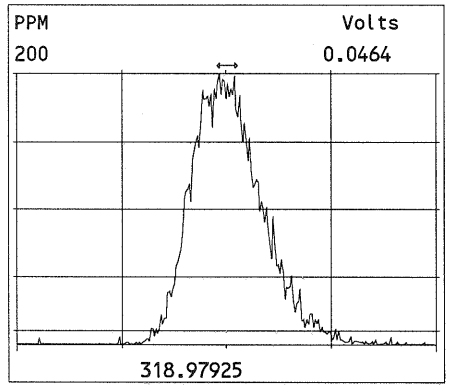
File:25JUL06M #1-347 Acq:26-JUL-2006 09:16:01 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:21 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072506M3 File Text:Frontier Analytical Laboratory

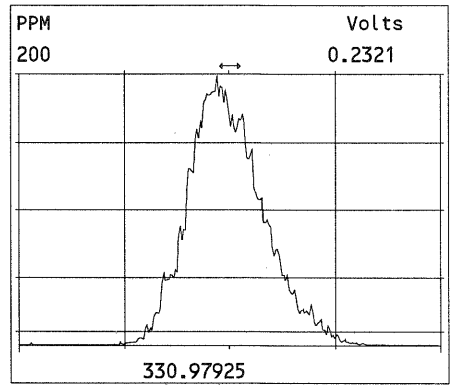


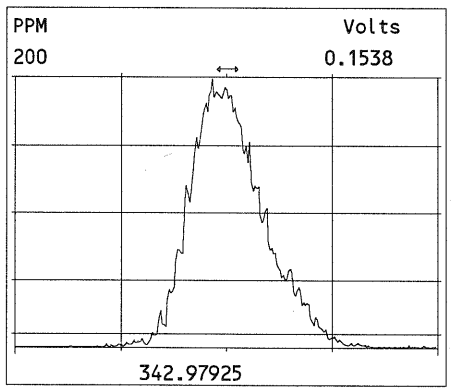
Peak Locate Examination:26-JUL-2006:10:12 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

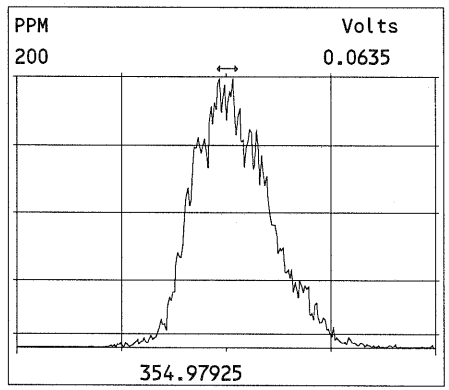


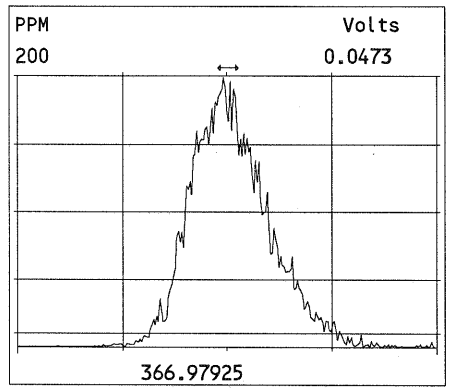


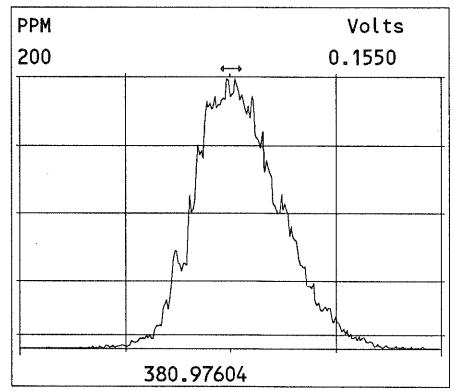


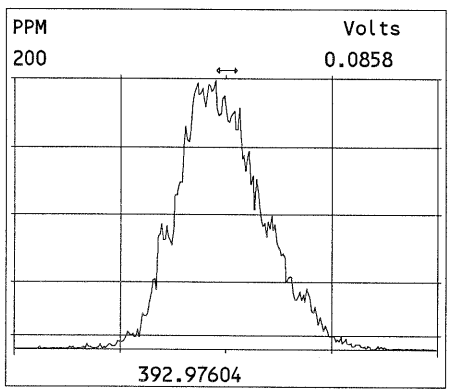


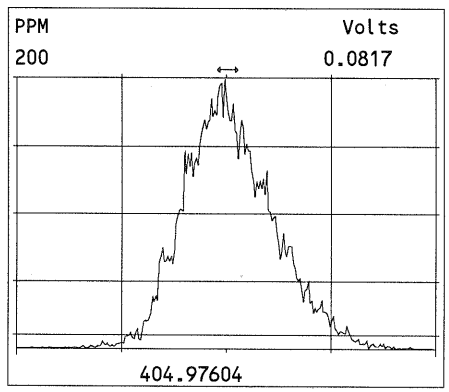


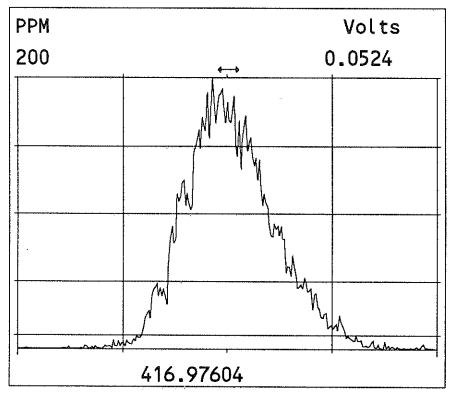




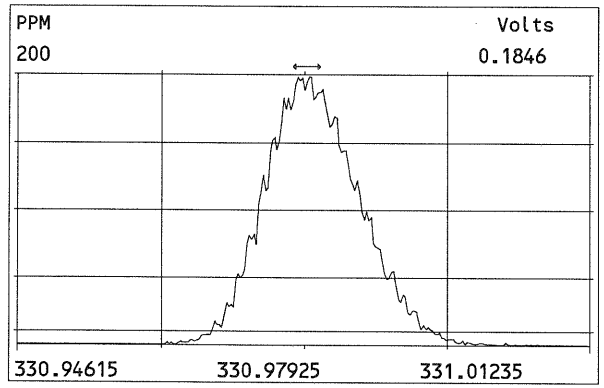


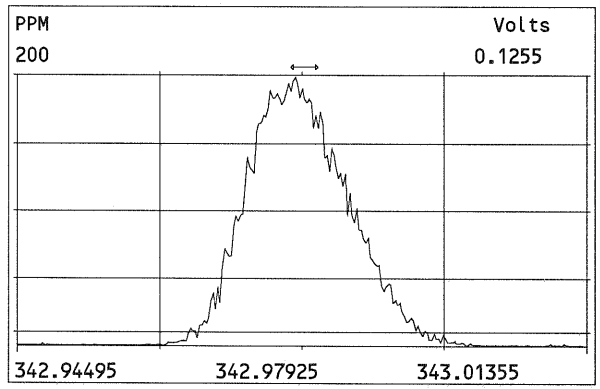


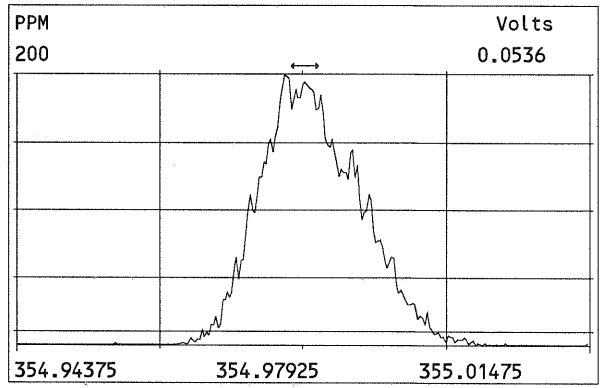


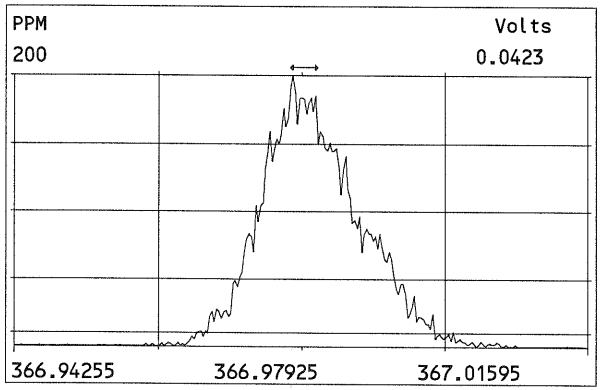


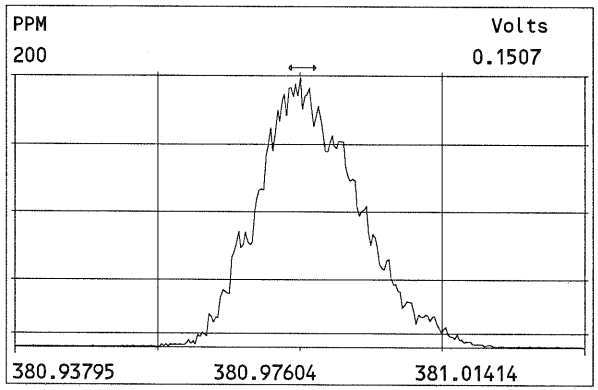
Peak Locate Examination:26-JUL-2006:10:14 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

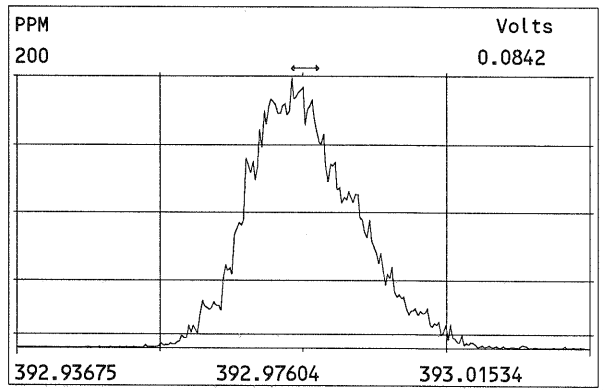


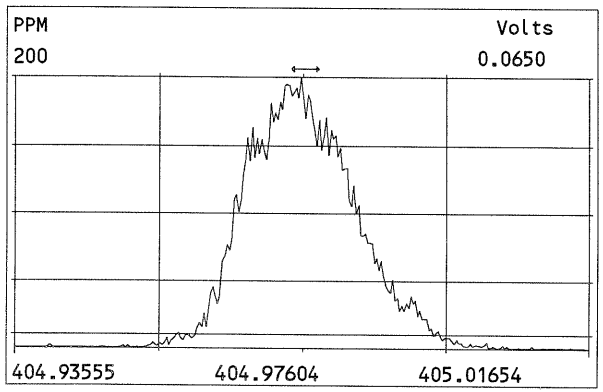


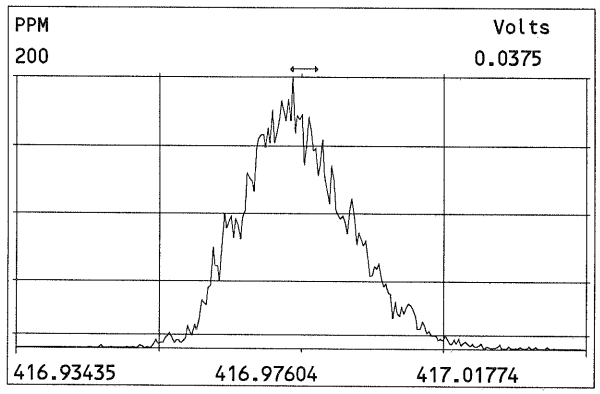




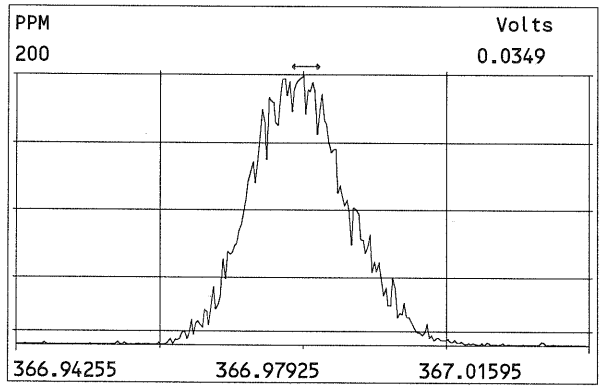


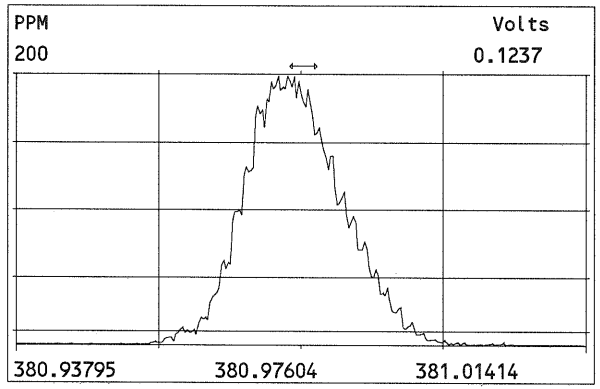


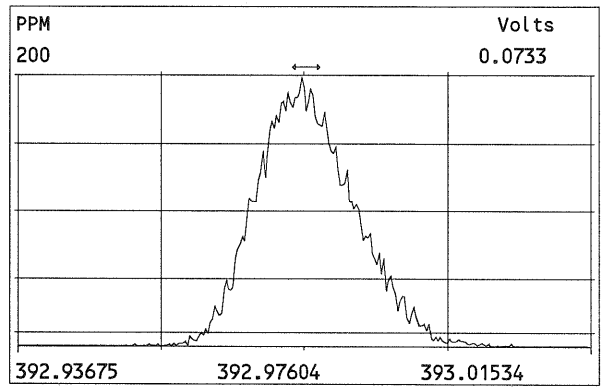


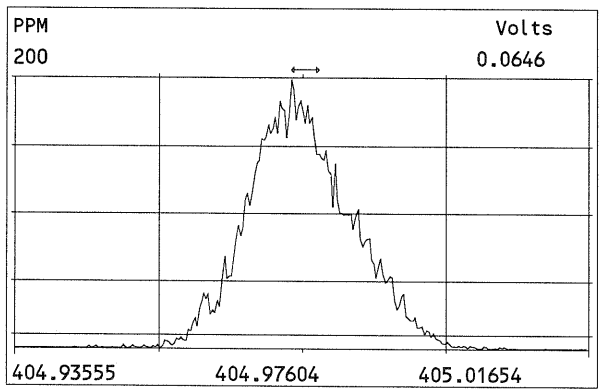


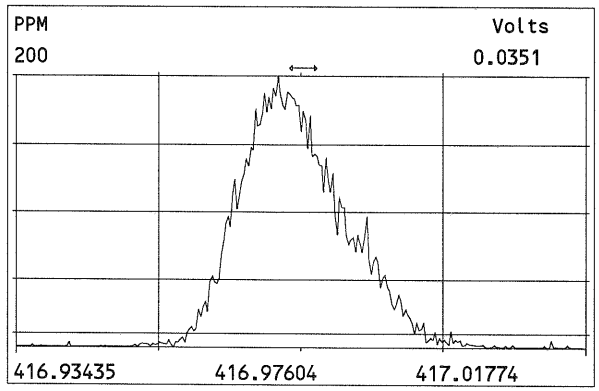
Peak Locate Examination:26-JUL-2006:10:16 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

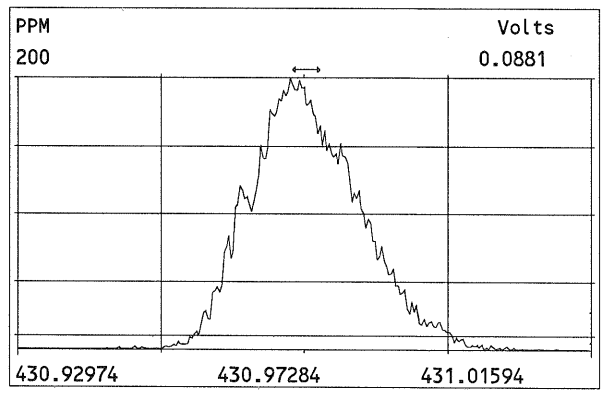


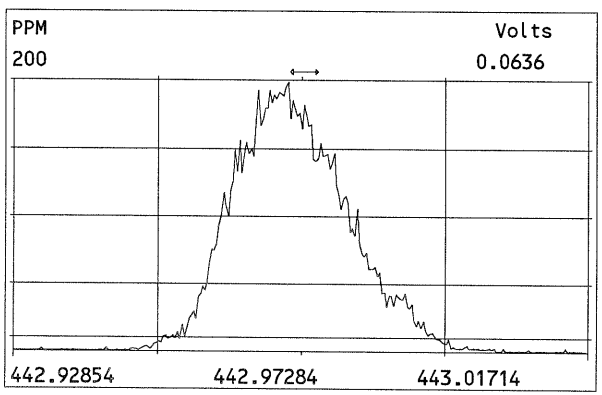


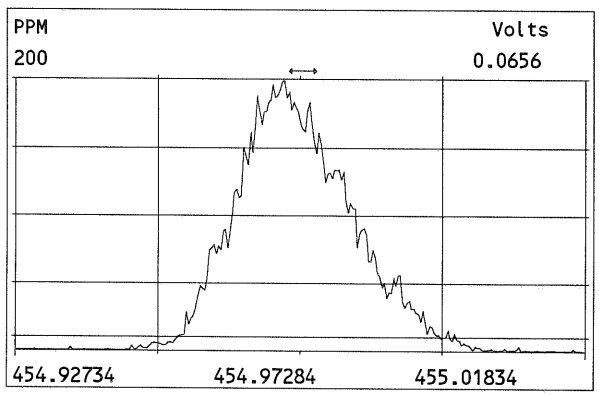




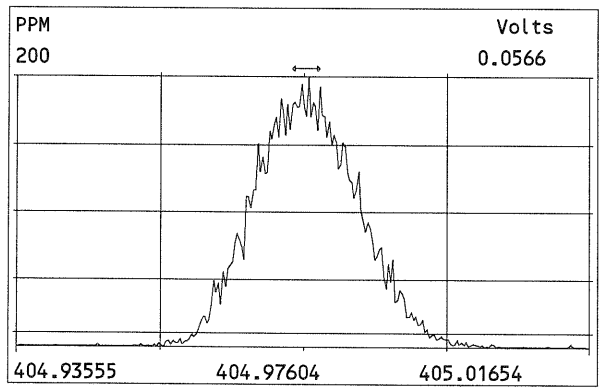


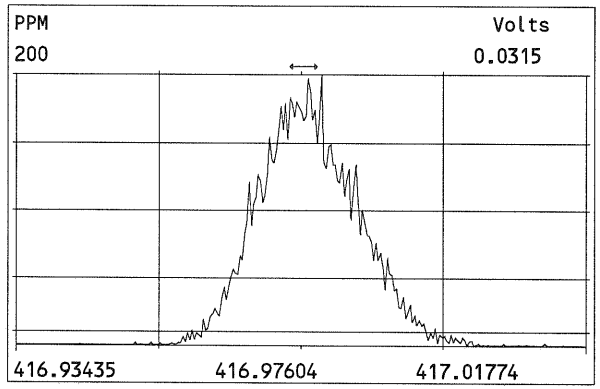


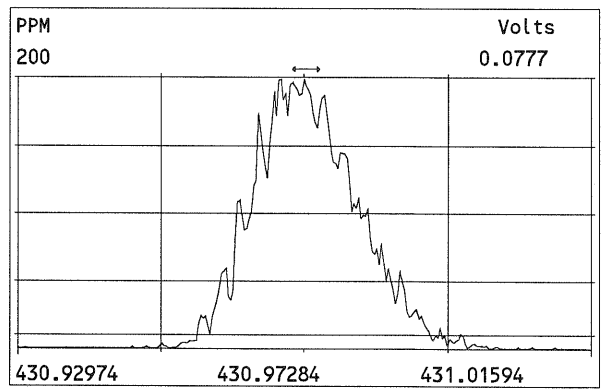


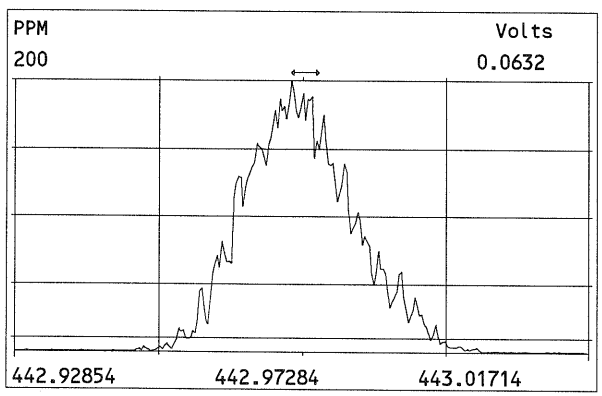


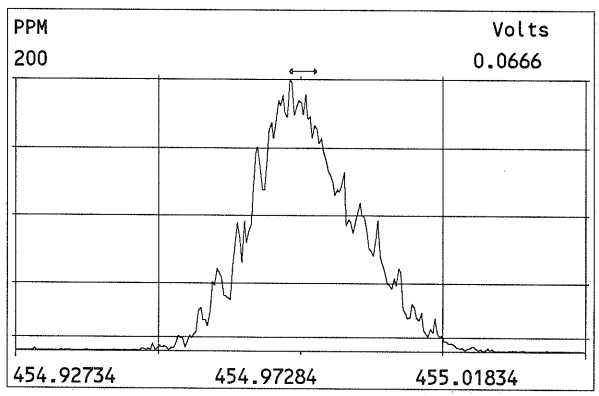
Peak Locate Examination:26-JUL-2006:10:18 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

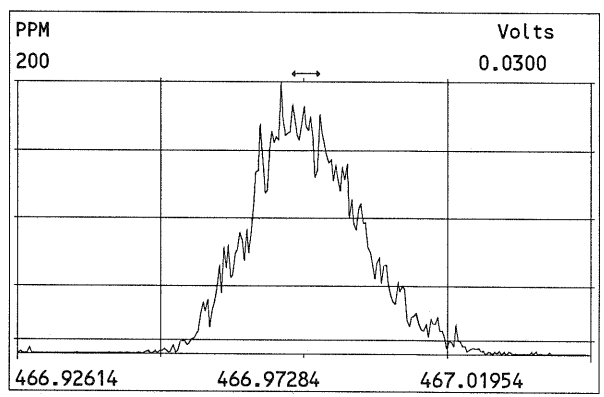


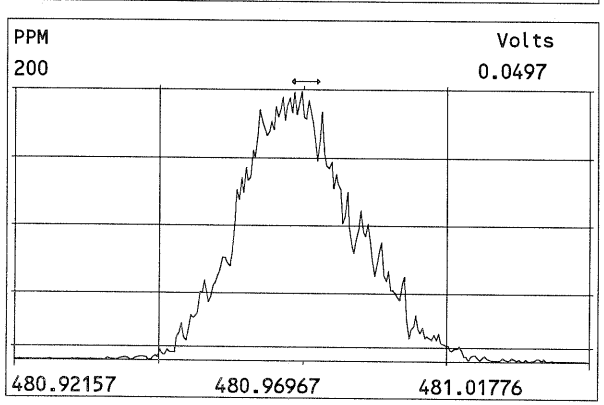




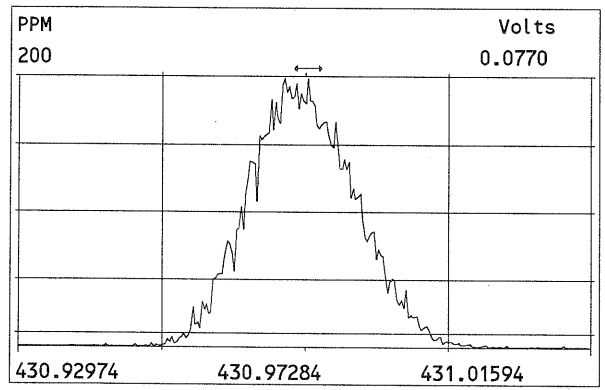


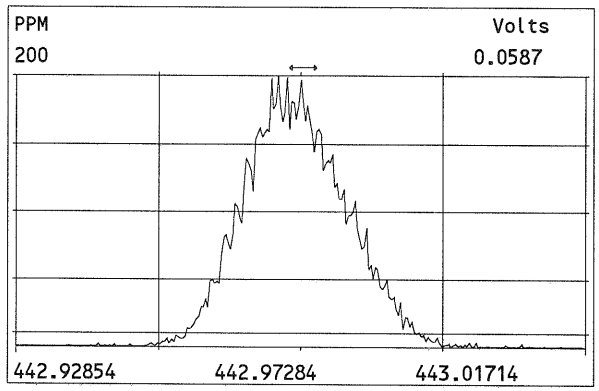


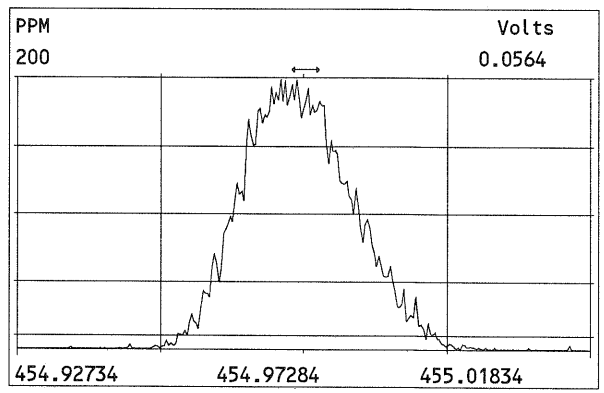


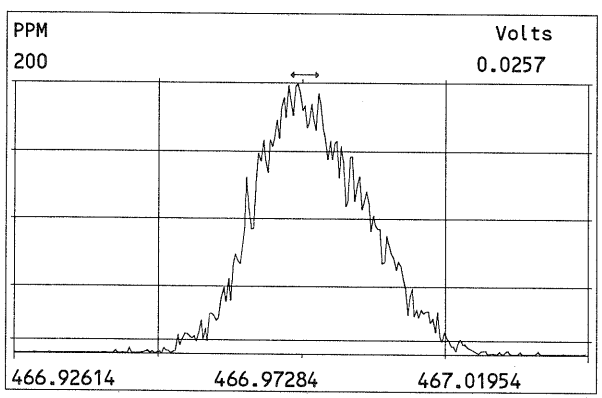


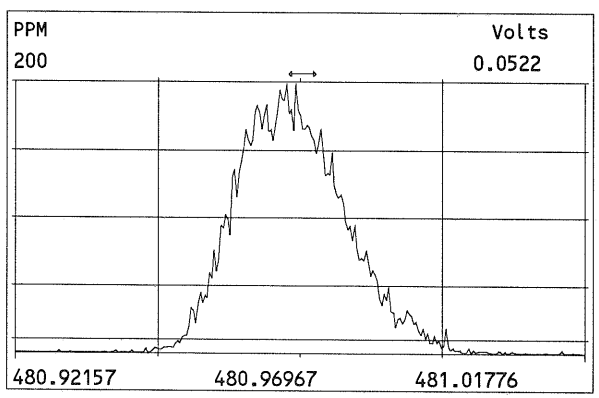
Peak Locate Examination:26-JUL-2006:10:20 File:25JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

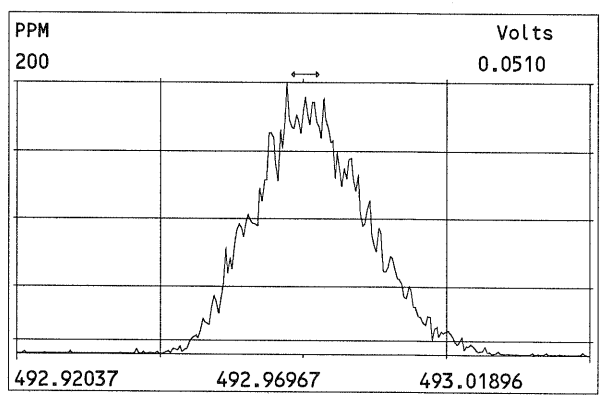


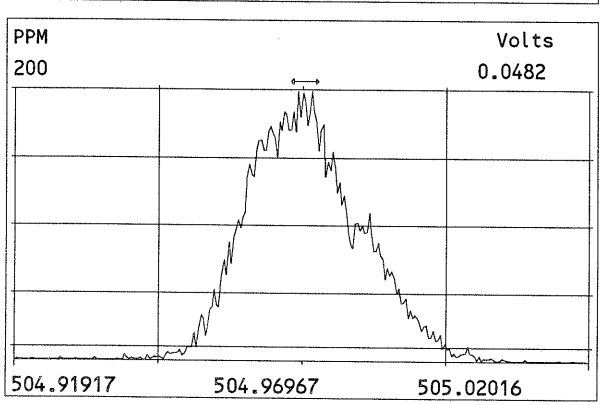


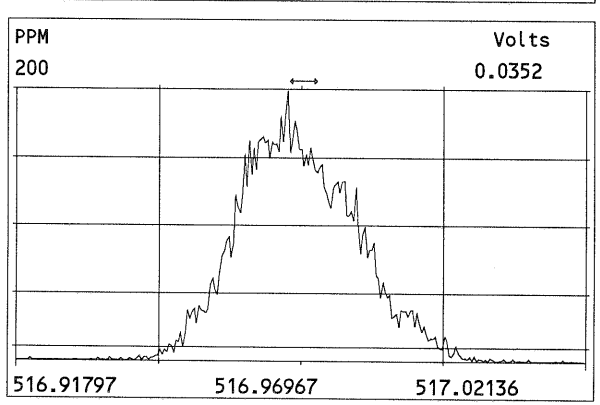












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 26JUL06M Sam:1 Analysis Date: 26-JUL-06 17:34:24

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	10.1	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	y	48.9	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	49.4	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	48.6	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05-1.43	y	49.9	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	y	49.2	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	99.9	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	y	9.01	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	49.2	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	48.1	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.4	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.9	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.8	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	y	50.3	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	y	52.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	51.9	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	101	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: DRJ Date: 7/27/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 26JUL06M Sam:1 Analysis Date: 26-JUL-06 17:34:24

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	y	95.7	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	95.0	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	y	95.7	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	97.4	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	96.2	72.0 - 138
13C-OCDD	M+2/M+4	0.90	0.76-1.02	y	207	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	y	98.6	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	89.9	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	92.8	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	92.1	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	91.8	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	90.4	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	90.3	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	y	88.4	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.43	0.37-0.51	y	90.7	77.0 - 129
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	192	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.56	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: DIJ Date: 7/27/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 26JUL06M Sam:1 Analysis Date: 26-JUL-06 Time: 17:34:24

DB-5 IS Data Filename: 26JUL06M Sam:1 Analysis Date: 26-JUL-06 Time: 17:34:24

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:25	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:21	1,2,8,9-TCDF (L)	28:34
1,2,4,7,9-PeCDD (F)	30:16	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:47	1,2,3,8,9-PeCDF (L)	34:13
1,2,4,6,7,9-HxCDD (F)	36:07	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:10	1,2,3,7,8,9-HxCDF (L)	39:44
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:08	1,2,3,4,7,8,9-HpCDF (L)	45:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DN Date: 7/27/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 26-JUL-06 17:34:24 CS3 or VER Data Filename: 26JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.001	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.237	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.173	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.222	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: BN Date: 7/27/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 26-JUL-06 17:34:24 CS3 or VER Data Filename: 26JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.985	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DJ Date: 7/27/06

FAL ID: ST072606M1 Filename: 26JUL06M Sam:1 Acquired: 26-JUL-06 17:34:24 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072606M1 EndCal: ST072606M2
Results: 3967RI GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 98.7
WHO 1998 Tox: 123

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.46e+07	0.76 y	27:25	1.10	10.1		2.50	-	*	
1,2,3,7,8-PeCDD	5.52e+07	1.55 y	33:12	0.90	48.9		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.16e+07	1.24 y	38:33	0.96	49.4		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.32e+07	1.24 y	38:43	0.83	48.6		2.50	-	*	
1,2,3,7,8,9-HxCDD	3.77e+07	1.26 y	39:10	0.77	49.9		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	3.96e+07	1.05 y	44:08	0.86	49.2		2.50	-	*	
OCDD	6.52e+07	0.90 y	49:40	0.87	99.9		2.50	-	*	
2,3,7,8-TCDF	1.63e+07	0.77 y	26:39	0.99	9.01		2.50	-	*	
1,2,3,7,8-PeCDF	6.95e+07	1.55 y	31:29	0.80	49.2		2.50	-	*	
2,3,4,7,8-PeCDF	7.26e+07	1.57 y	32:48	0.88	48.1		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.77e+07	1.25 y	37:10	1.42	50.4		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.65e+07	1.27 y	37:22	0.97	50.9		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.19e+07	1.25 y	38:18	1.26	50.8		2.50	-	*	
1,2,3,7,8,9-HxCDF	6.06e+07	1.25 y	39:44	1.34	50.3		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.25e+07	1.04 y	42:15	1.28	52.9		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.07e+07	1.03 y	45:03	1.22	51.9		2.50	-	*	
OCDF	7.27e+07	0.90 y	50:02	0.90	101		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.32e+08	0.80 y	27:24	1.00	95.7					95.7
13C-1,2,3,7,8-PeCDD	1.25e+08	1.59 y	33:11	0.96	95.0					95.0
13C-1,2,3,4,7,8-HxCDD	8.79e+07	1.26 y	38:32	0.90	95.7					95.7
13C-1,2,3,6,7,8-HxCDD	1.07e+08	1.27 y	38:42	1.09	97.4					97.4
13C-1,2,3,4,6,7,8-HpCDD	9.36e+07	1.04 y	44:07	0.96	96.2					96.2
13C-OCDD	1.50e+08	0.90 y	49:38	0.71	207					103
13C-2,3,7,8-TCDF	1.82e+08	0.79 y	26:38	0.94	98.6					98.6
13C-1,2,3,7,8-PeCDF	1.77e+08	1.56 y	31:28	1.00	89.9					89.9
13C-2,3,4,7,8-PeCDF	1.72e+08	1.59 y	32:47	0.94	92.8					92.8
13C-1,2,3,4,7,8-HxCDF	8.05e+07	0.52 y	37:09	0.86	92.1					92.1
13C-1,2,3,6,7,8-HxCDF	1.14e+08	0.51 y	37:21	1.23	91.8					91.8
13C-2,3,4,6,7,8-HxCDF	8.11e+07	0.51 y	38:18	0.88	90.4					90.4
13C-1,2,3,7,8,9-HxCDF	9.01e+07	0.51 y	39:43	0.98	90.3					90.3
13C-1,2,3,4,6,7,8-HpCDF	7.75e+07	0.45 y	42:14	0.86	88.4					88.4
13C-1,2,3,4,7,8,9-HpCDF	6.44e+07	0.43 y	45:01	0.70	90.7					90.7
13C-OCDF	1.60e+08	0.89 y	50:01	0.82	192					96.1
37Cl-2,3,7,8-TCDD	9.54e+06		27:25	0.81	8.56					85.6
13C-1,2,3,4-TCDD	1.38e+08	0.80 y	26:49	-	71.9					
13C-1,2,3,4-TCDF	1.97e+08	0.78 y	25:34	-	68.5					
13C-1,2,3,7,8,9-HxCDD	1.02e+08	1.26 y	39:09	-	68.0					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.90e+07		24:04	1.10	40.8		2.50	-	*	17
Total Penta-Dioxins	1.46e+08		30:16	0.90	130		2.50	-	*	16
Total Hexa-Dioxins	1.73e+08		36:07	0.85	208		2.50	-	*	23
Total Hepta-Dioxins	7.73e+07		42:16	0.86	96.0		2.50	-	*	33
Total Tetra-Furans	6.41e+07		23:04	0.99	35.4		2.50	-	*	26
1st Fn. Tot Penta-Furans	7.30e+07		28:26	0.84	50.0		2.50	-	*	1 PeCDF
Total Penta-Furans	1.94e+08		30:10	0.84	133		2.50	-	*	13 183
Total Hexa-Furans	2.93e+08		35:14	1.22	261		2.50	-	*	22
Total Hepta-Furans	9.55e+07		42:15	1.25	107		2.50	-	*	15

Analyst: BDN Date: 7/27/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:26JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

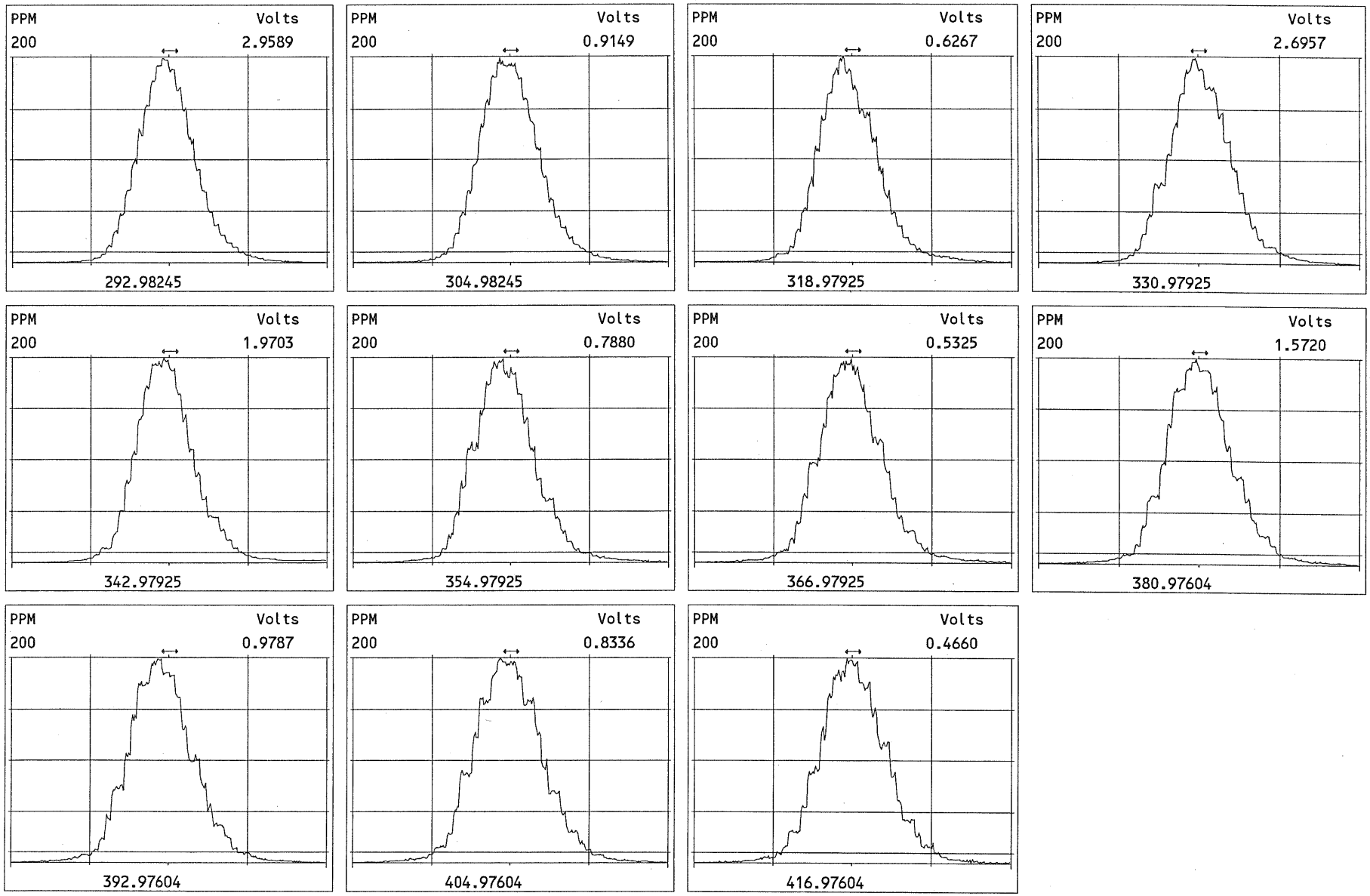
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
26JUL06M	1	ST072606M1	1613 CS3 (051212J)	26-JUL-06 17:34:24	ST072606M1	ST072606M2	
26JUL06M	2	SB072606M1	Solvent Blank	26-JUL-06 18:29:51	ST072606M1	ST072606M2	
26JUL06M	3	3673-001-0001-SA	WS -114	26-JUL-06 19:25:15	ST072606M1	ST072606M2	
26JUL06M	4	3659-001-0001-SA	WS -120	26-JUL-06 20:20:34	ST072606M1	ST072606M2	
26JUL06M	5	SB072606M2	Solvent Blank	26-JUL-06 21:15:49	ST072606M1	ST072606M2	
26JUL06M	6	3967-001-0001-SA	C-4, S-1 (1:10 DIL)	26-JUL-06 22:11:13	ST072606M1	ST072606M2	
26JUL06M	7	3968-001-0001-SA	STC-1 (1:10 DIL)	26-JUL-06 23:06:37	ST072606M1	ST072606M2	
26JUL06M	8	3968-003-0001-SA	STC-3 (1:20 DIL)	27-JUL-06 00:02:01	ST072606M1	ST072606M2	
26JUL06M	9	SB072606M3	Solvent Blank	27-JUL-06 00:57:25	ST072606M1	ST072606M2	
26JUL06M	10	SB072606M4	Solvent Blank	27-JUL-06 01:52:49	ST072606M1	ST072606M2	
26JUL06M	11	ST072606M2	1613 CS3 (051212J)	27-JUL-06 02:48:08	ST072606M1	ST072606M2	

DN 7/27/06

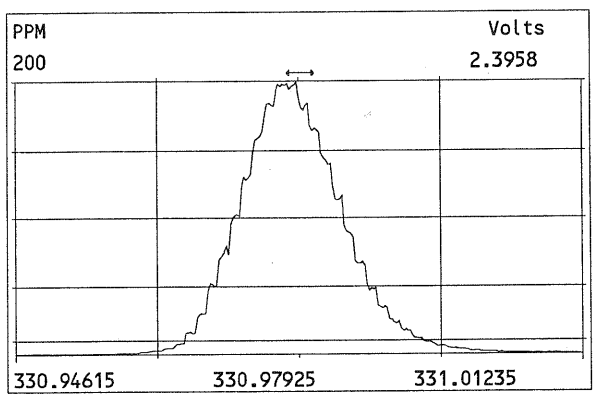
Data Backed Up:_____

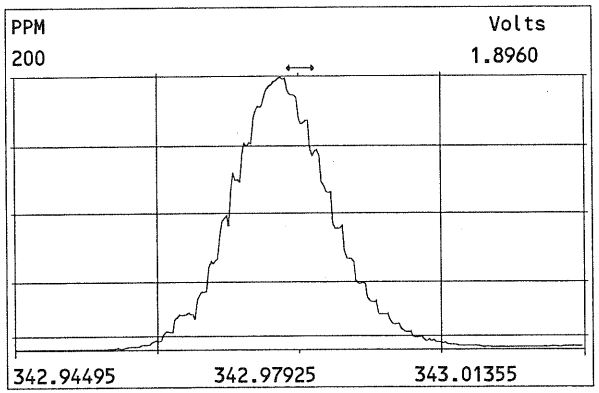
Date:_____

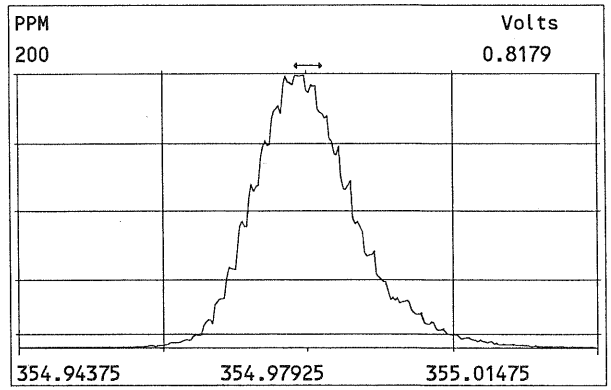
Peak Locate Examination:26-JUL-2006:17:32 File:26JUL06M
Experiment:PCDD Function:1 Reference:PFK

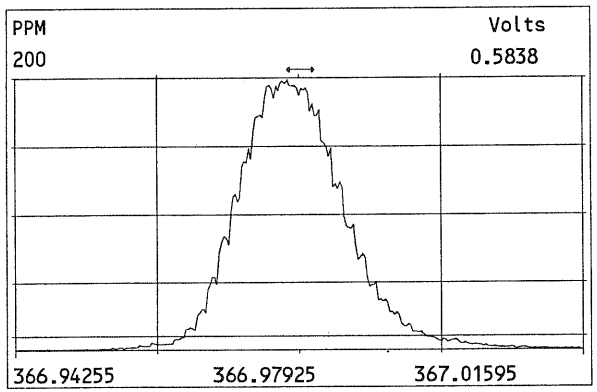


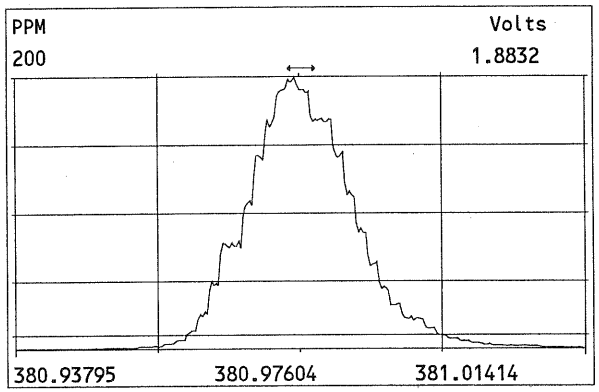
Peak Locate Examination:26-JUL-2006:17:32 File:26JUL06M
Experiment:PCDD Function:2 Reference:PFK

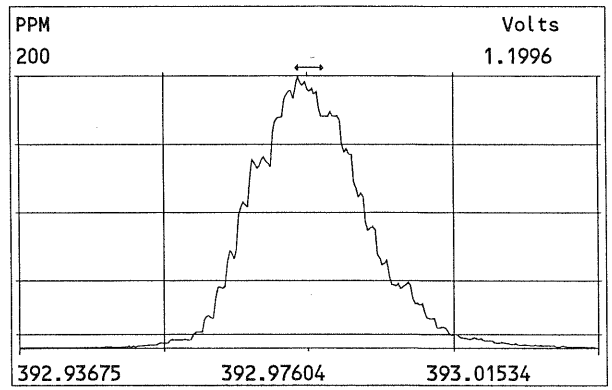


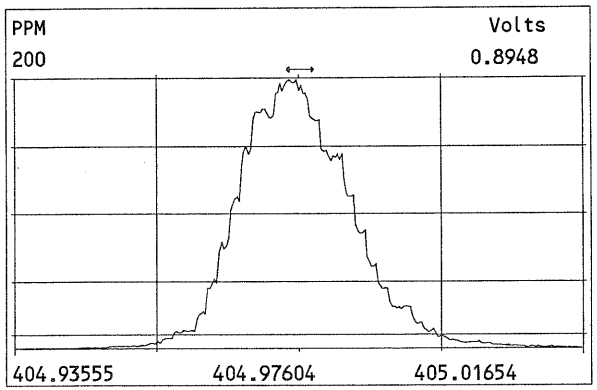


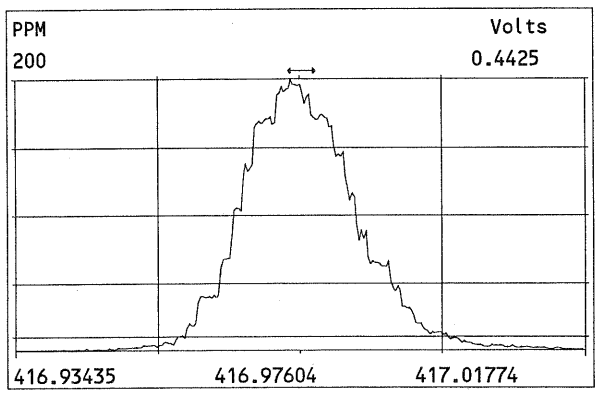




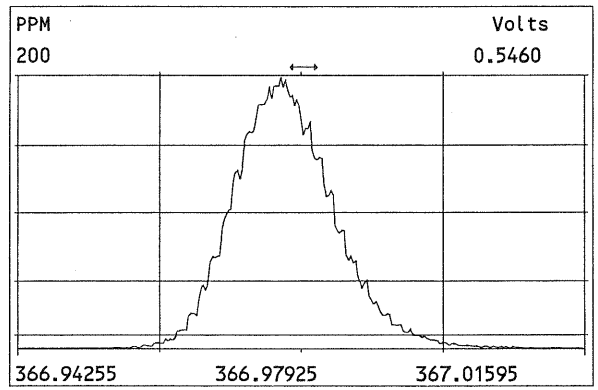


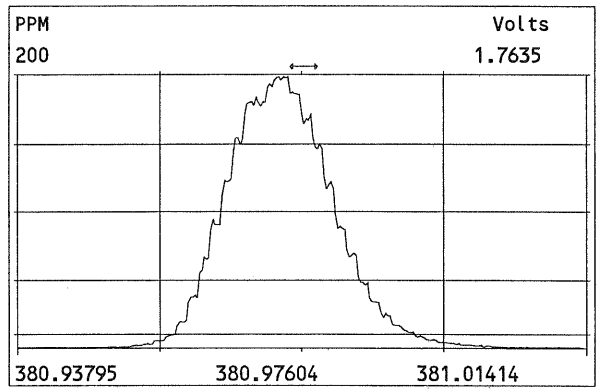


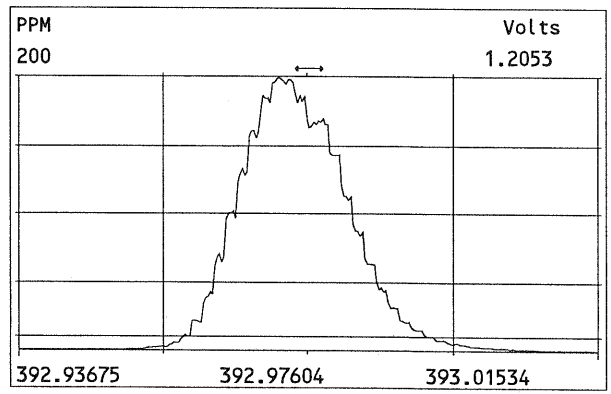


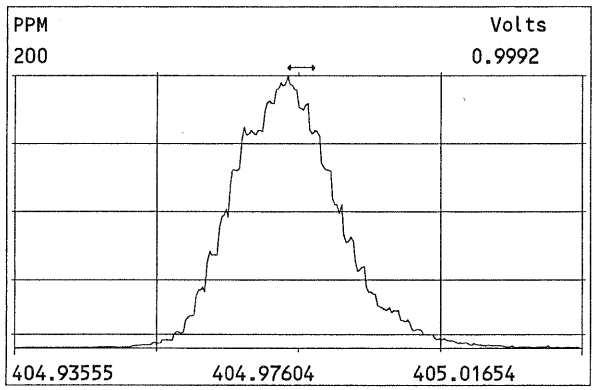


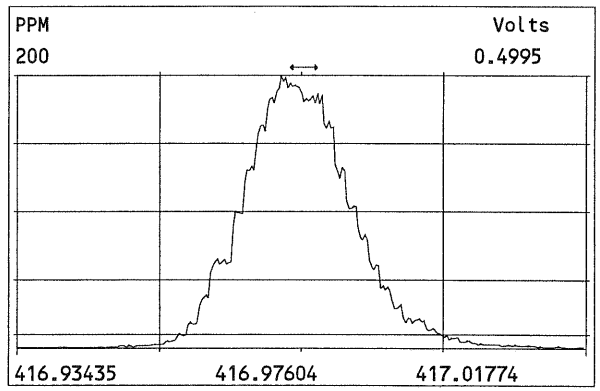
Peak Locate Examination:26-JUL-2006:17:33 File:26JUL06M
Experiment:PCDD Function:3 Reference:PFK

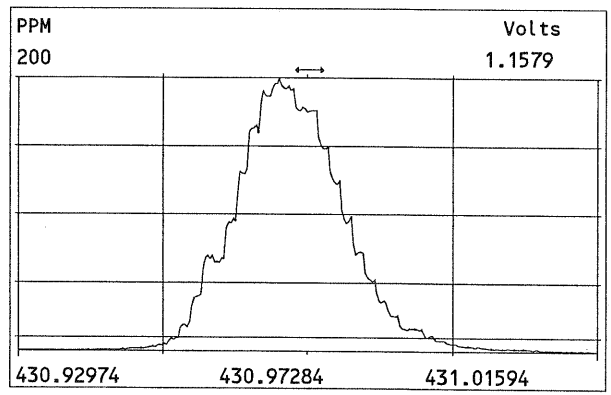


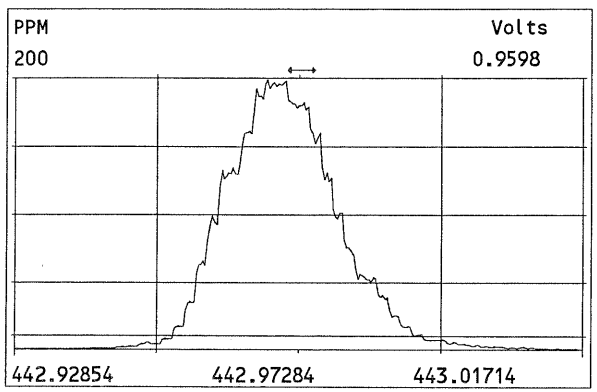


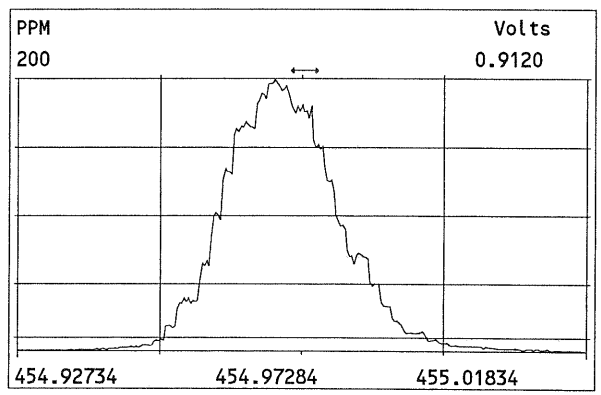






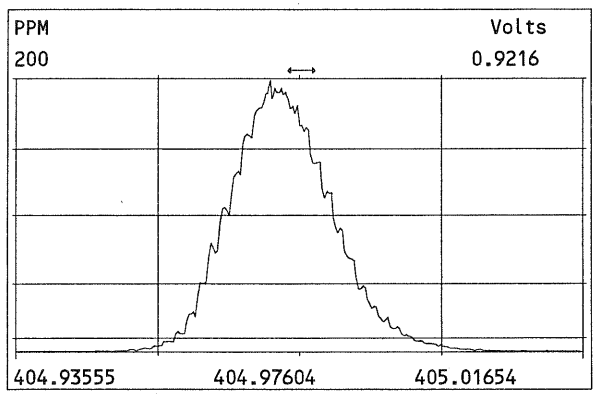


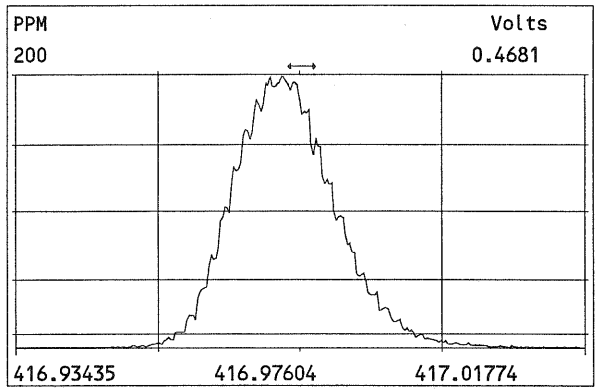


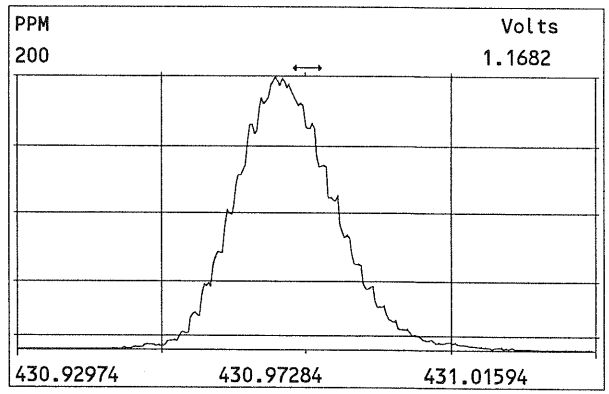


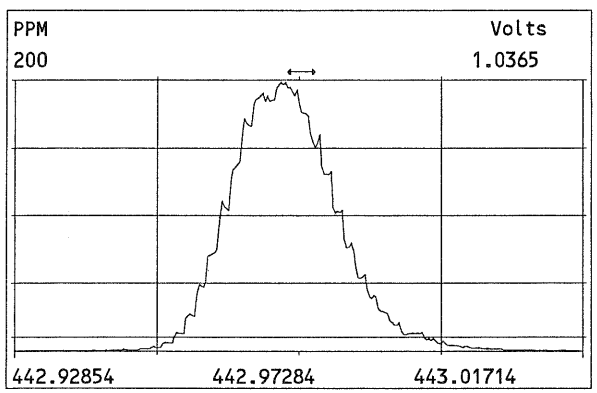
678

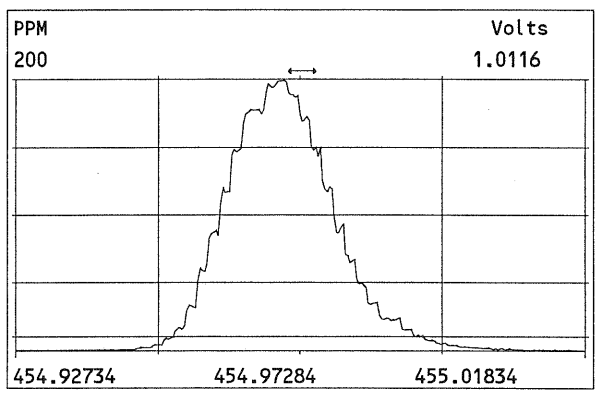
Peak Locate Examination:26-JUL-2006:17:33 File:26JUL06M
Experiment:PCDD Function:4 Reference:PFK

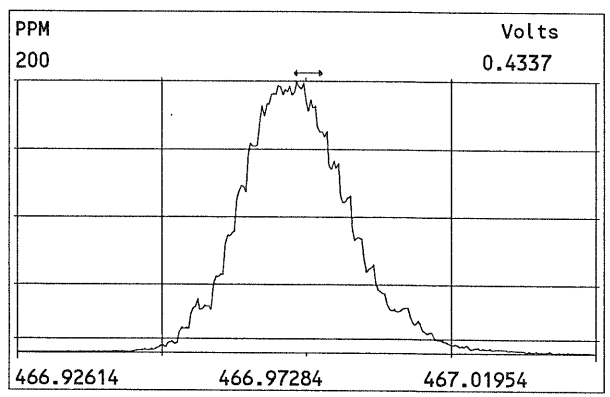


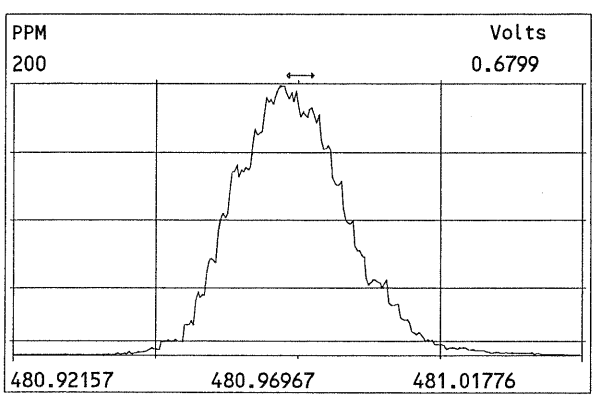




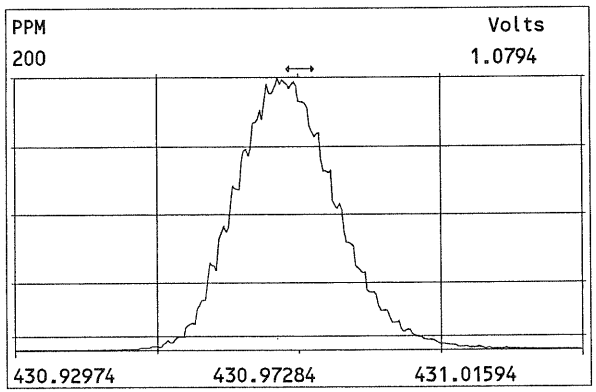


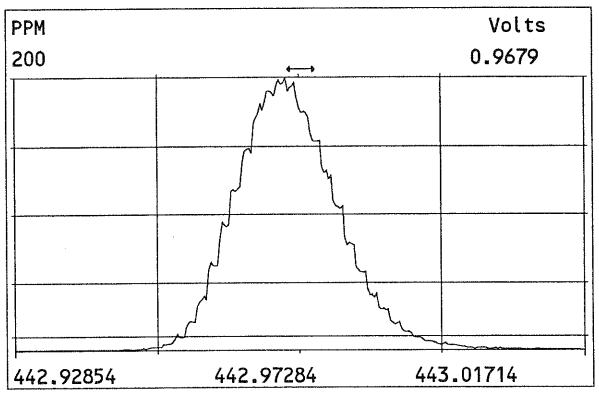


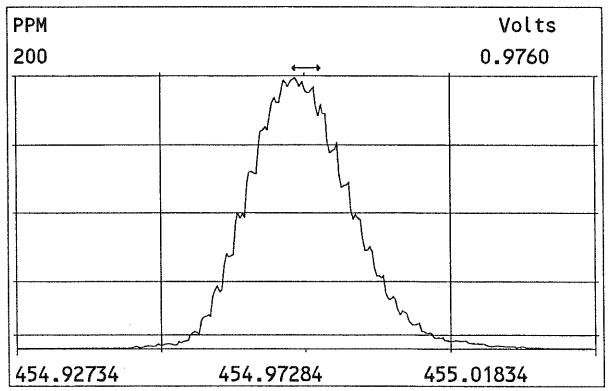


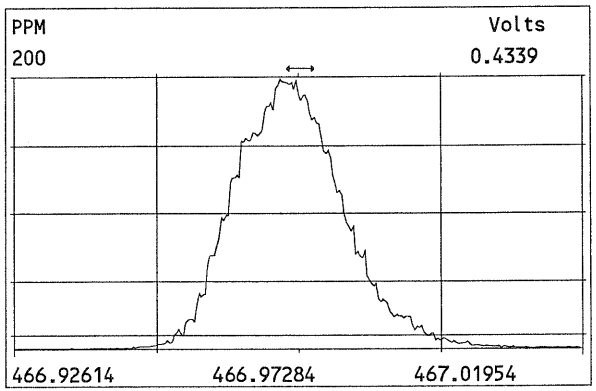


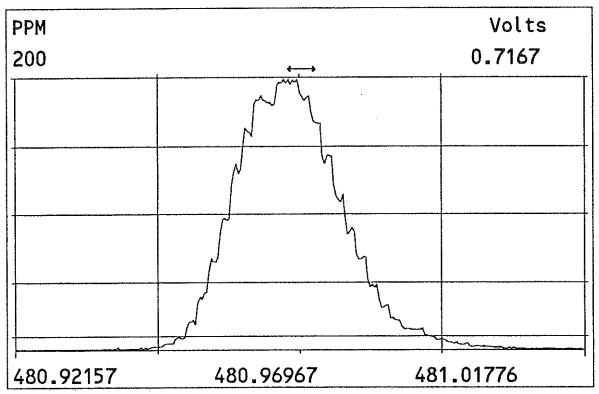
Peak Locate Examination:26-JUL-2006:17:34 File:26JUL06M
Experiment:PCDD Function:5 Reference:PFK

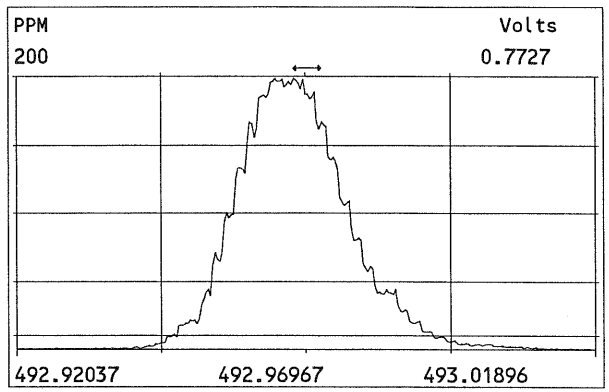


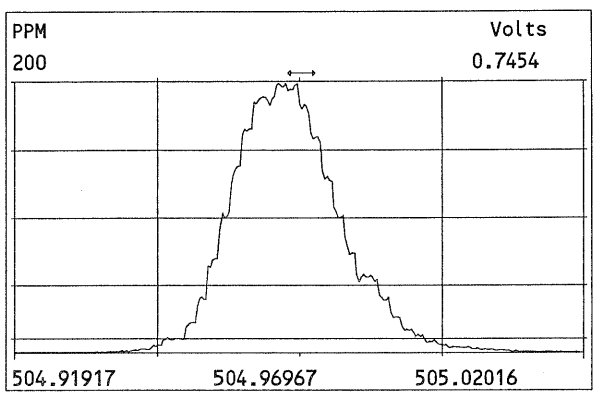


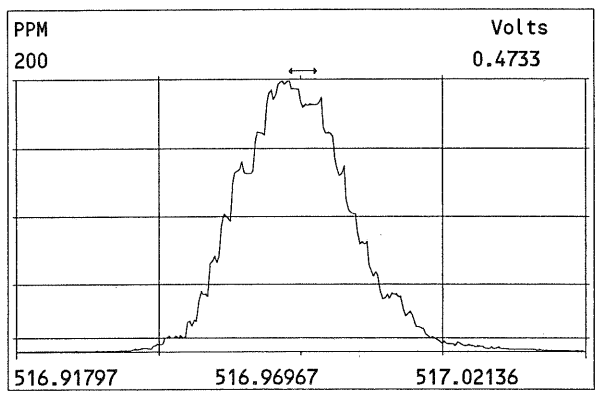




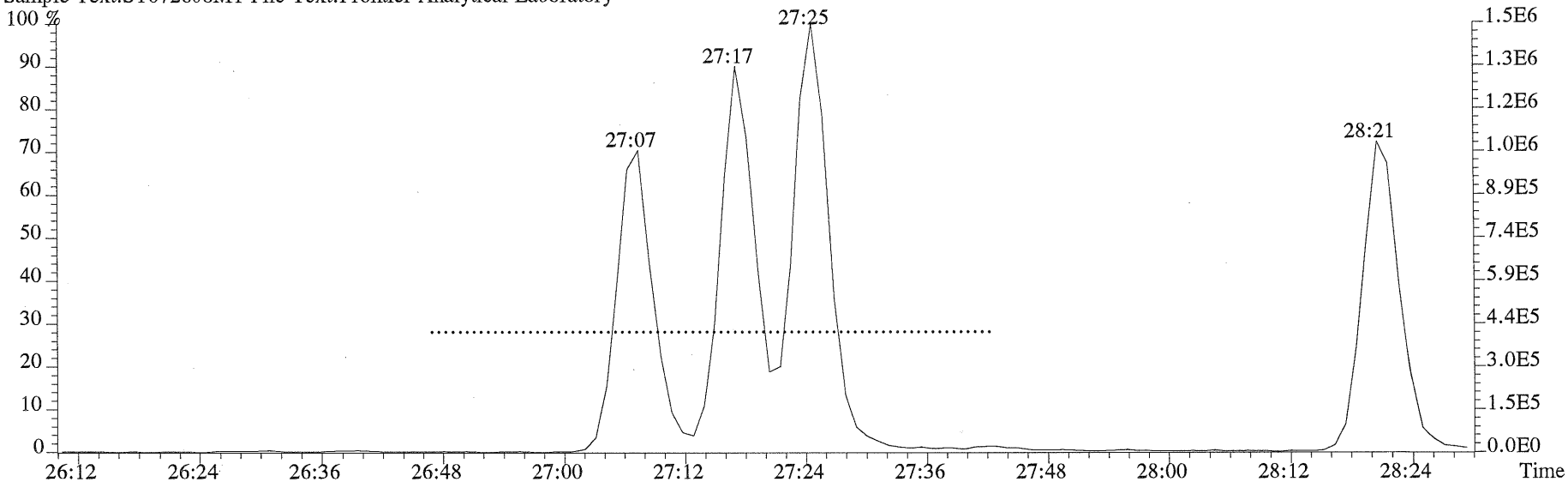








File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



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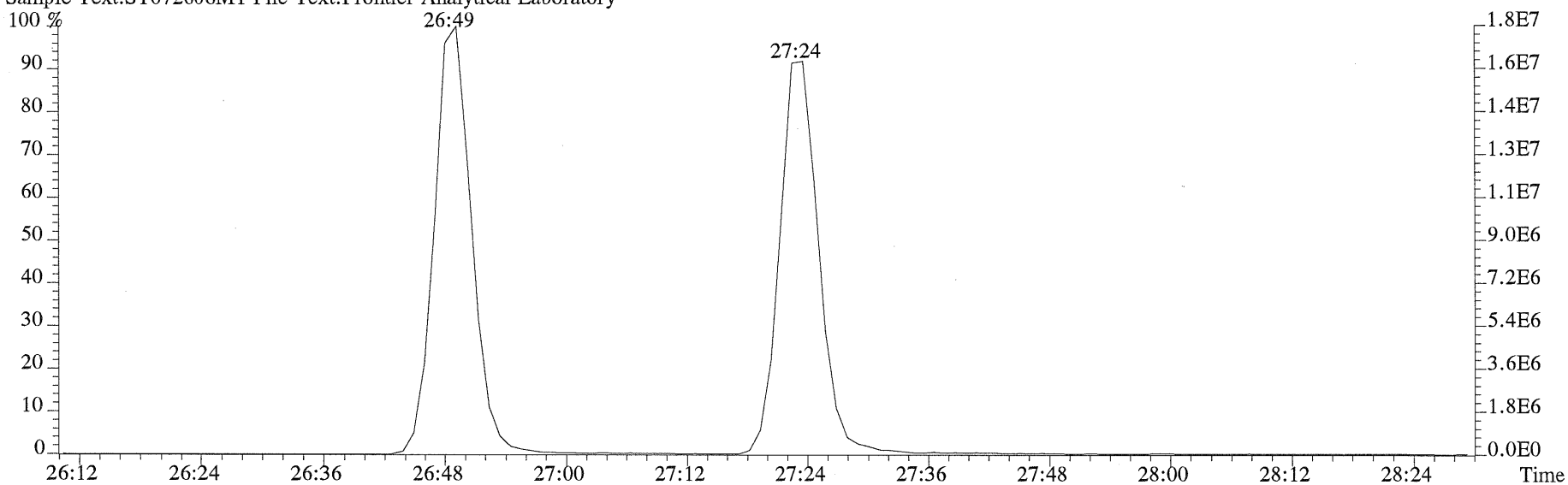

File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
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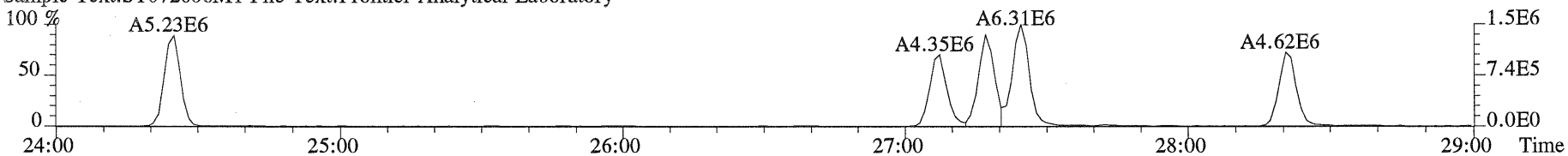
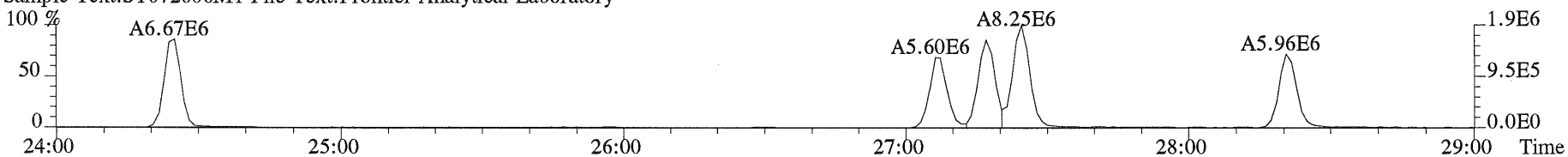
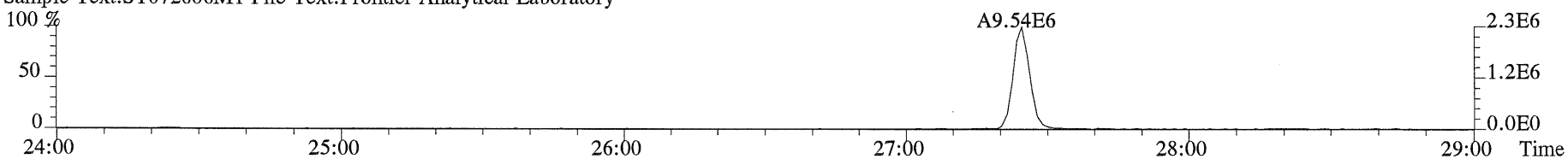


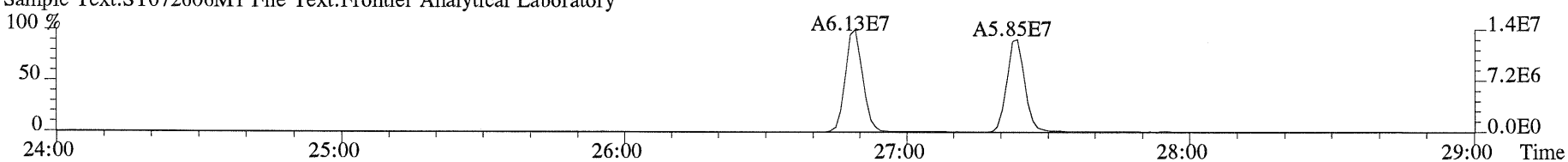
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



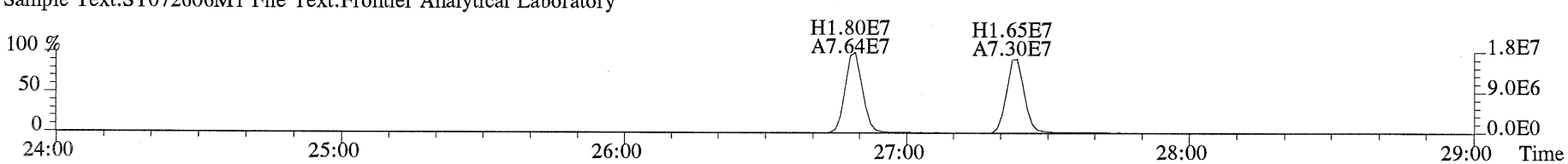
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



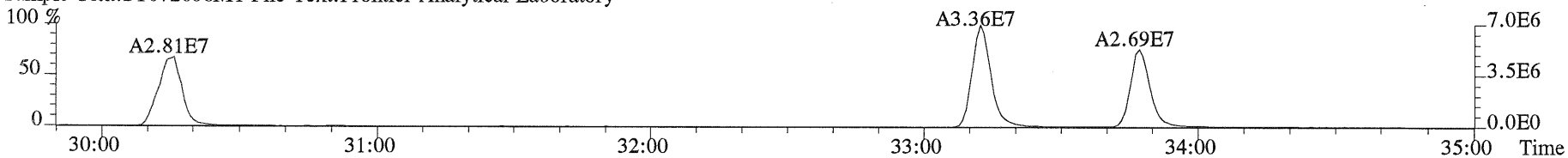
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



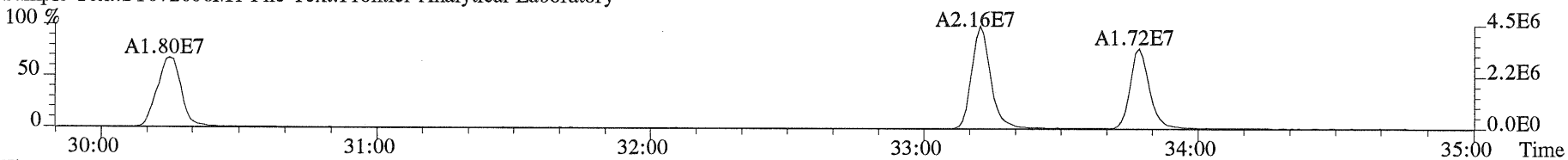
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



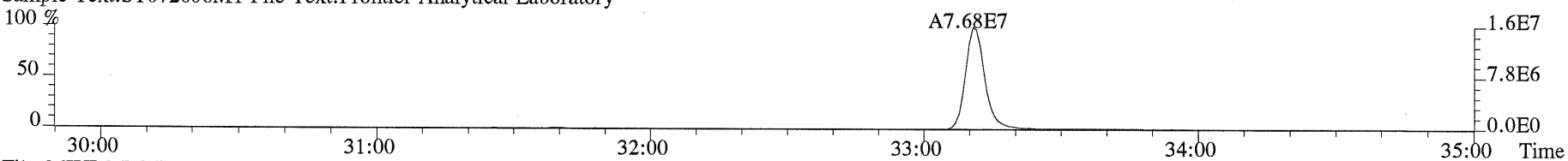
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



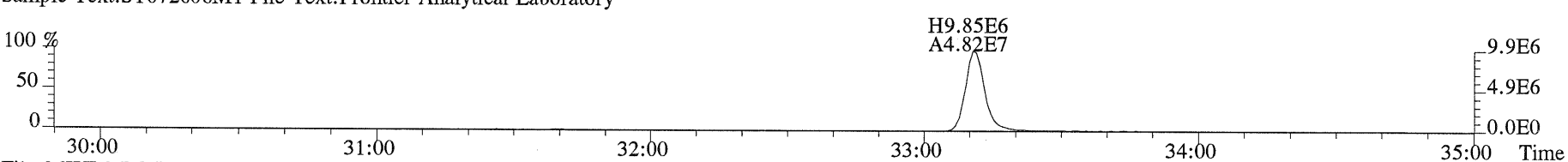
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



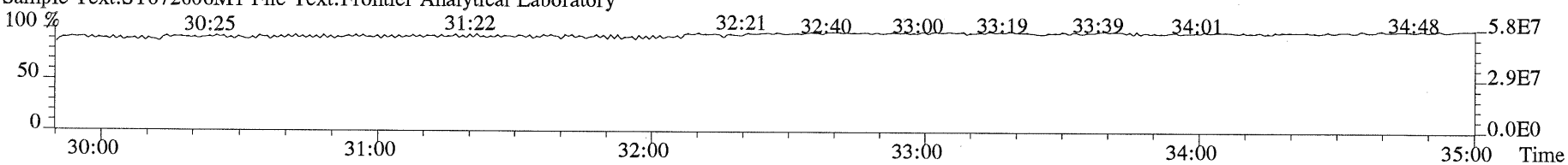
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



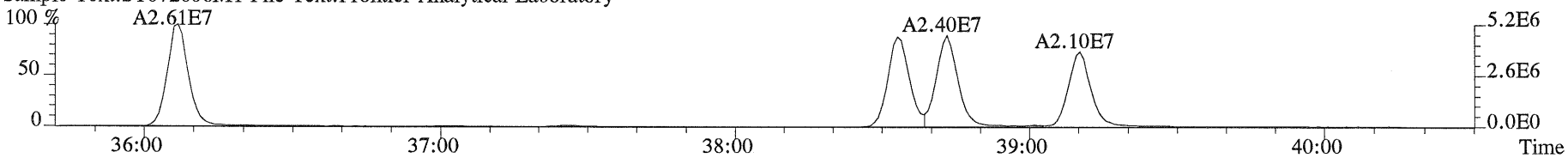
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



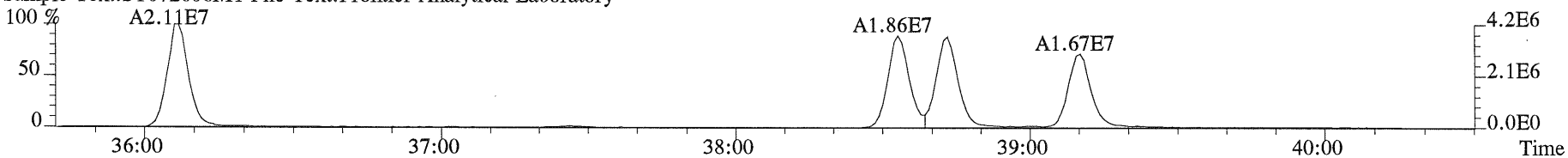
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



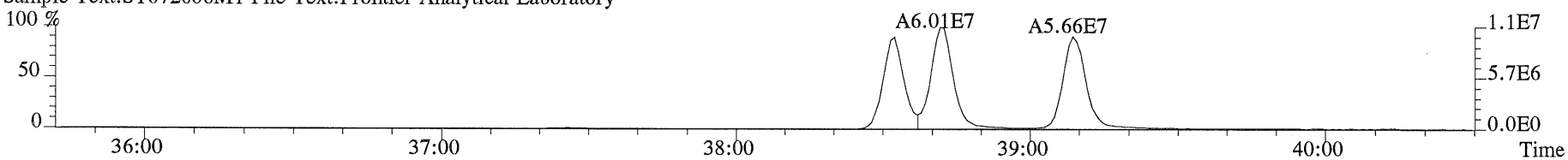
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



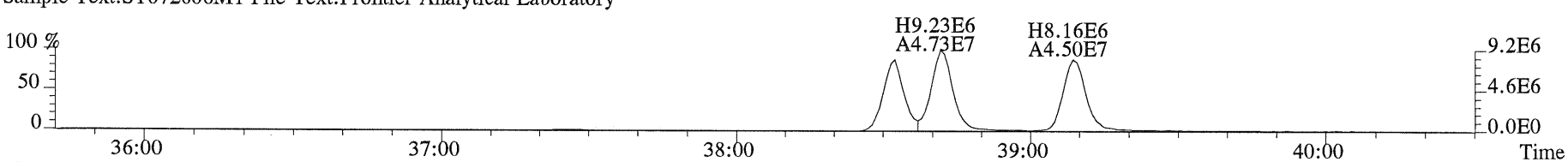
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



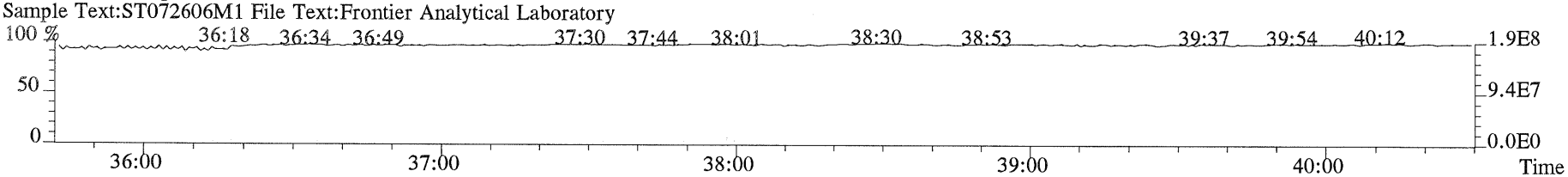
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



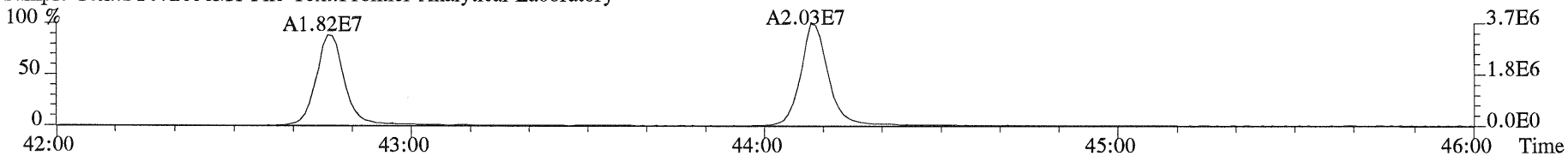
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



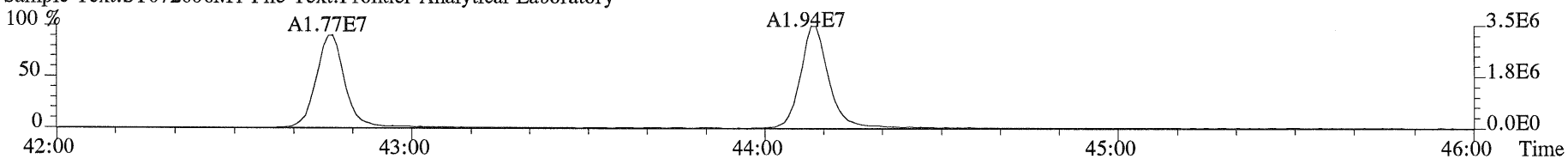
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



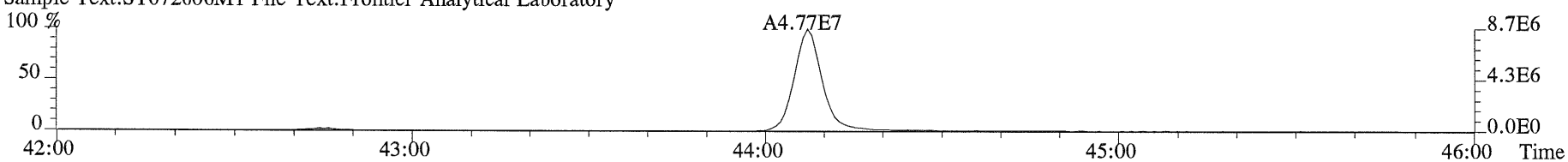
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



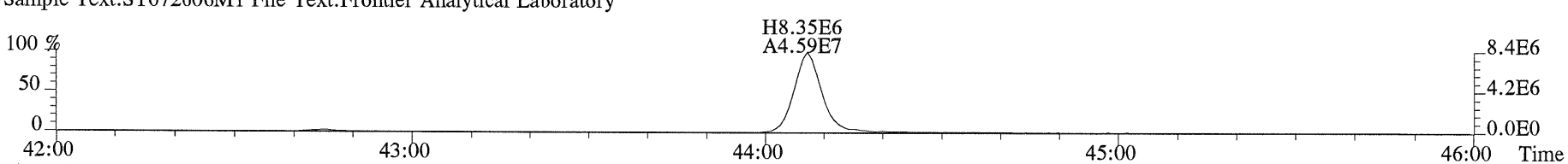
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



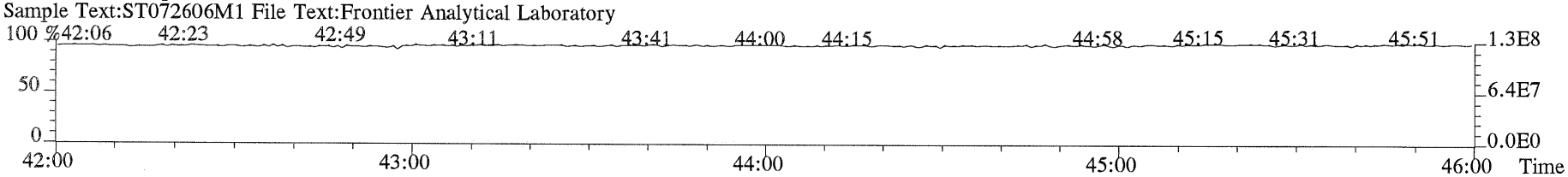
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



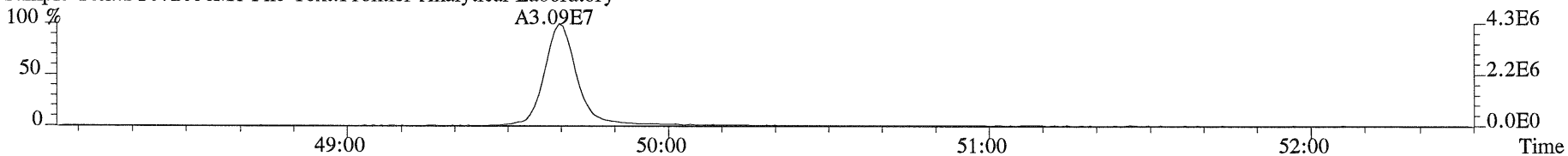
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



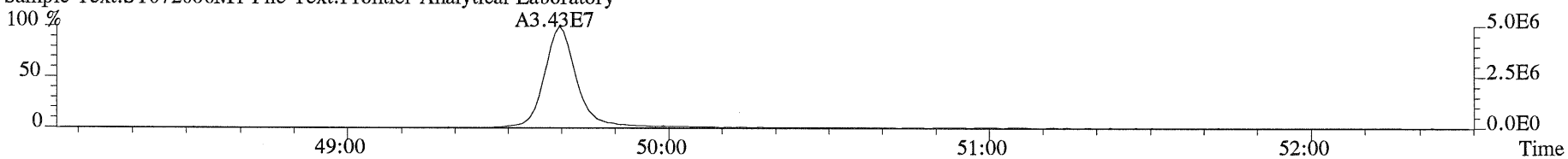
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



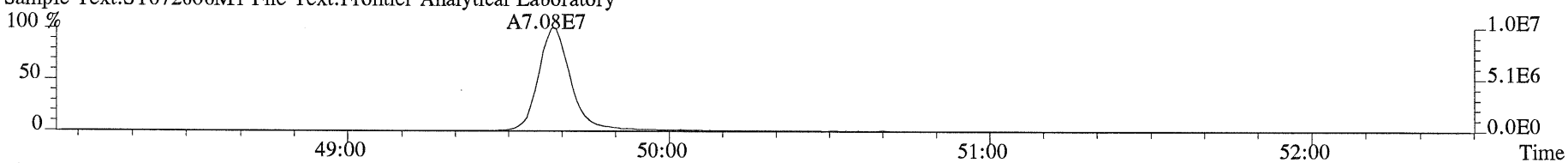
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



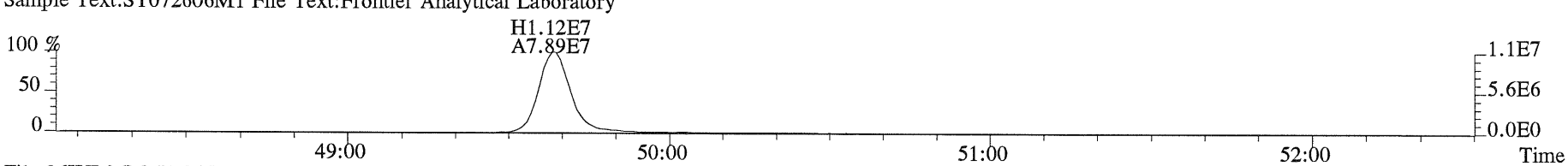
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



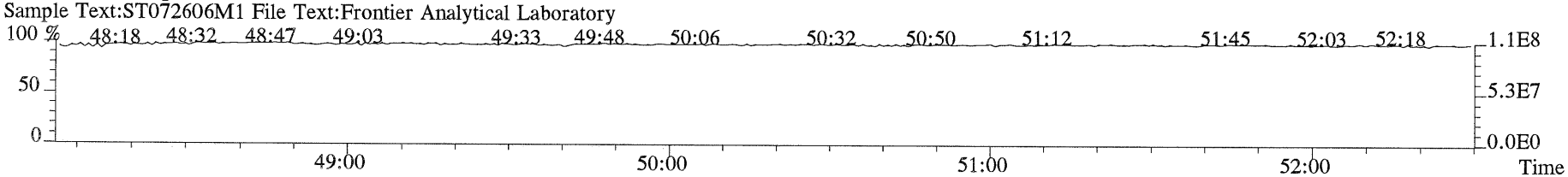
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



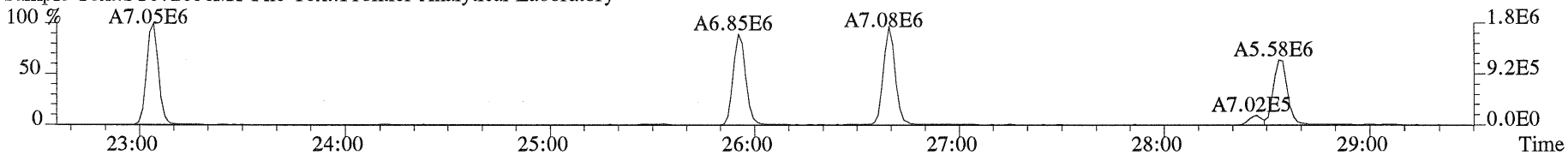
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



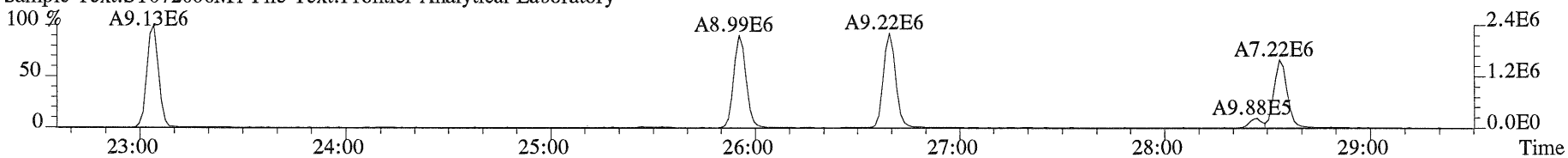
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



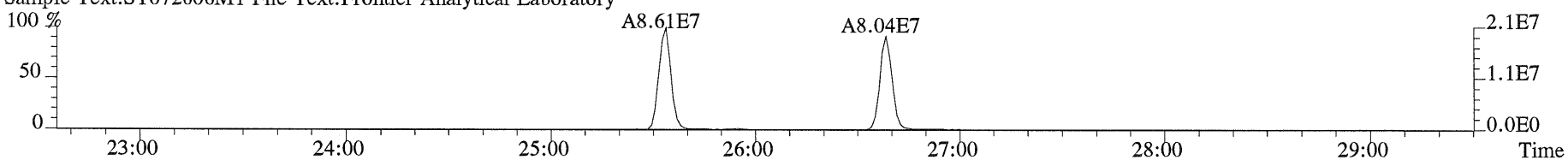
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



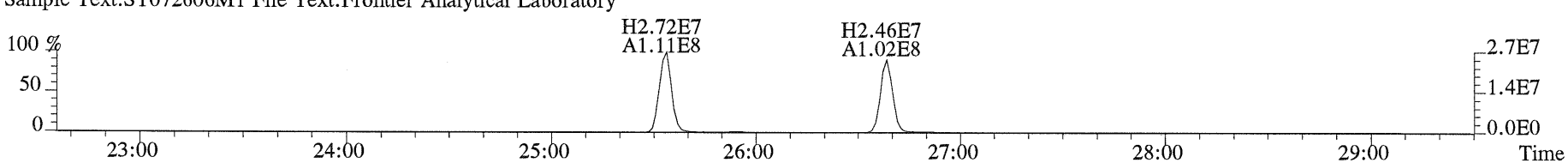
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



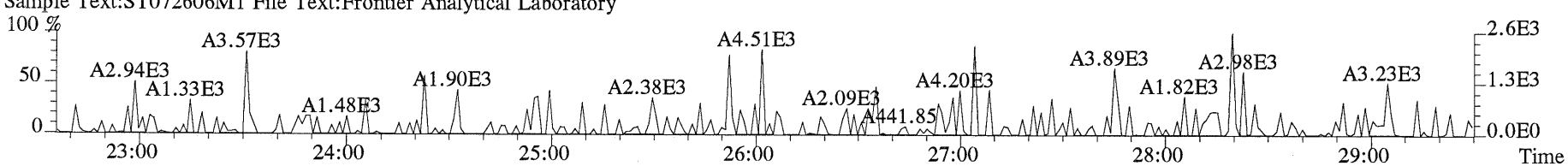
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



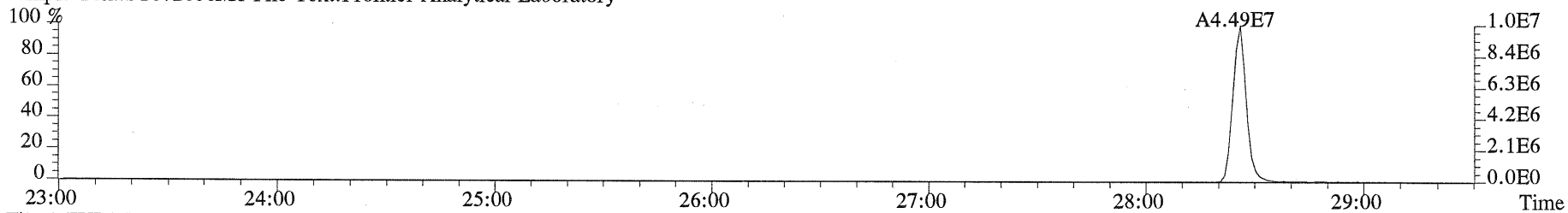
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



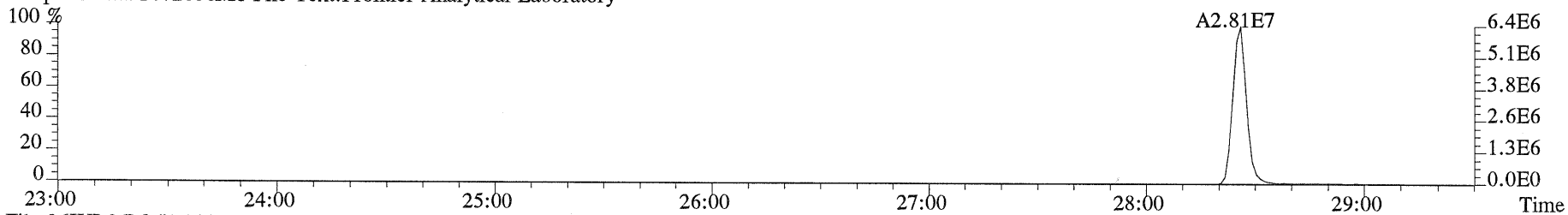
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



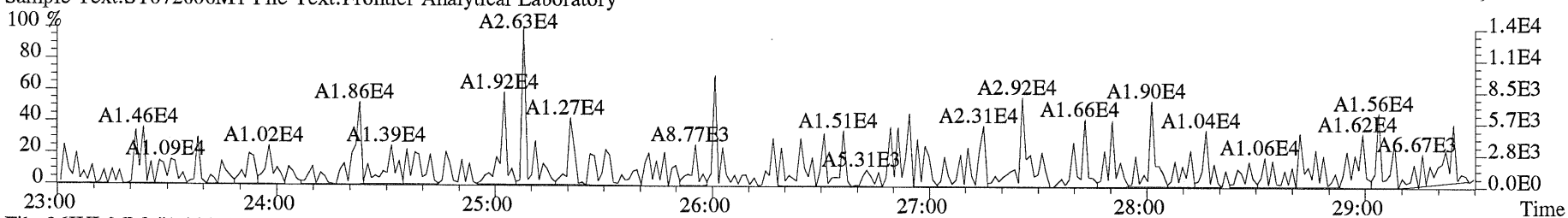
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



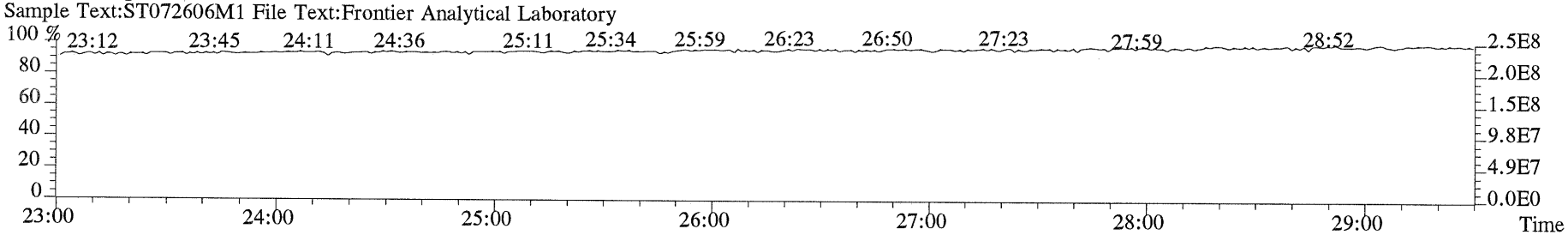
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



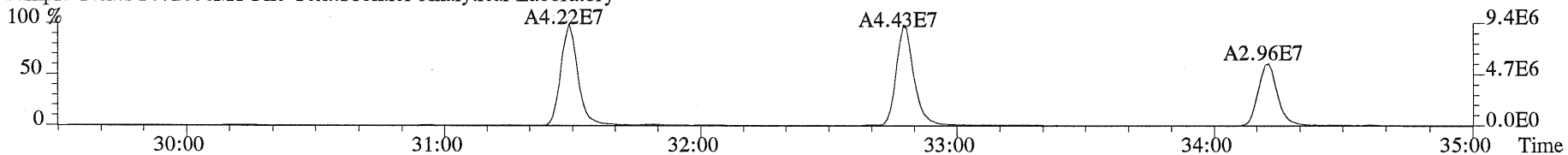
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



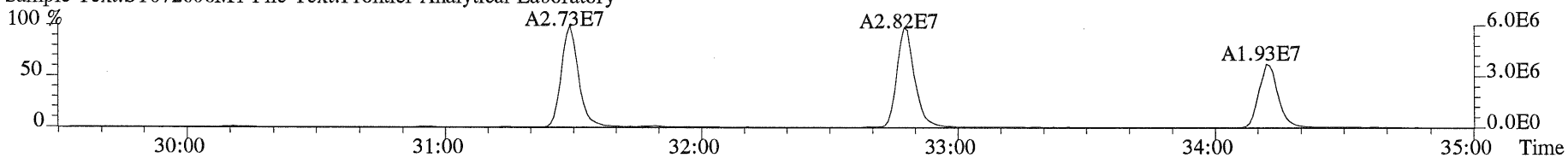
File:26JUL06M #1-390 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



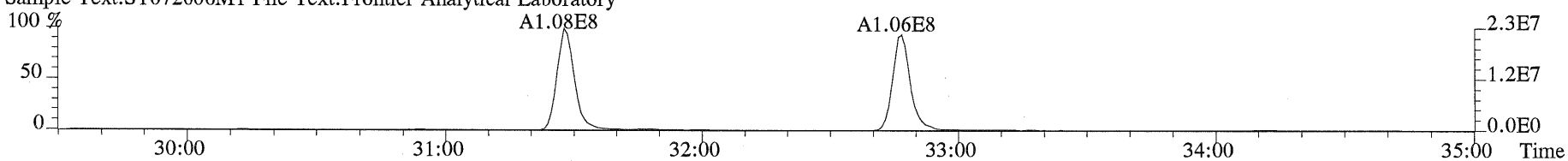
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



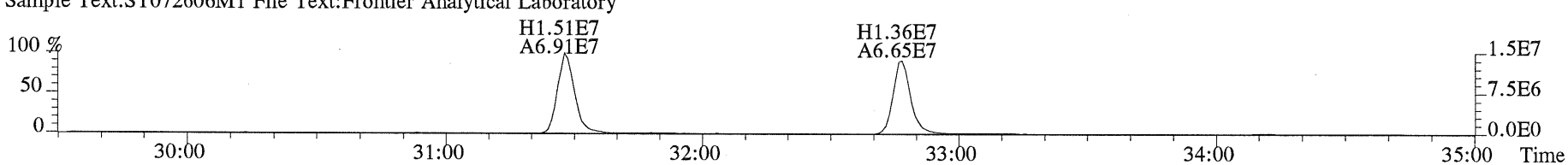
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



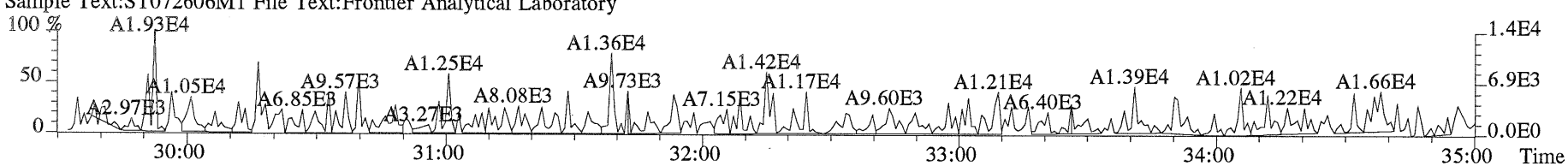
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



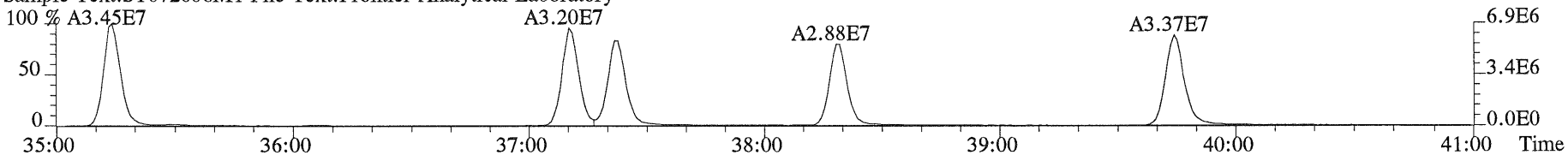
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



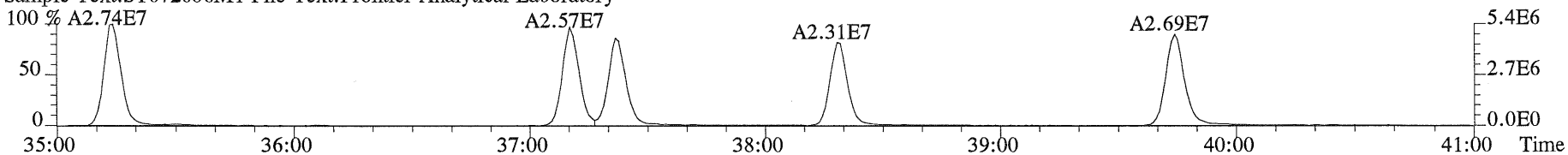
File:26JUL06M #1-425 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



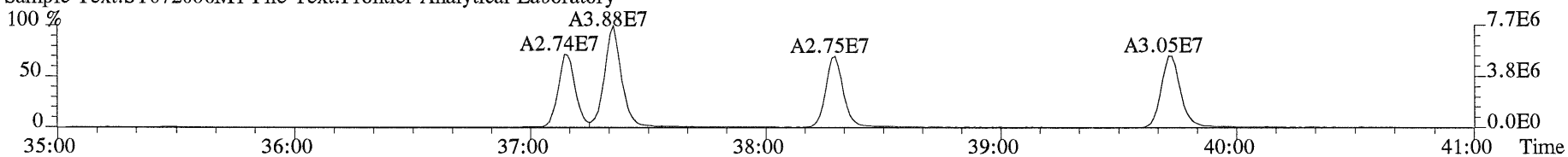
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



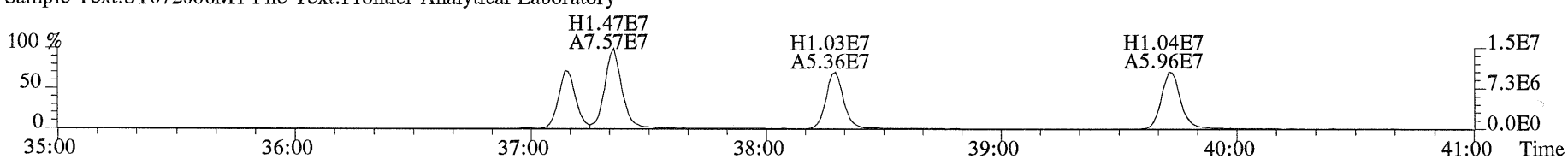
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



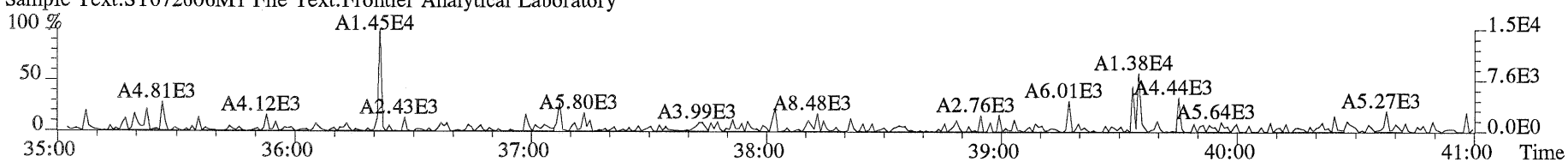
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



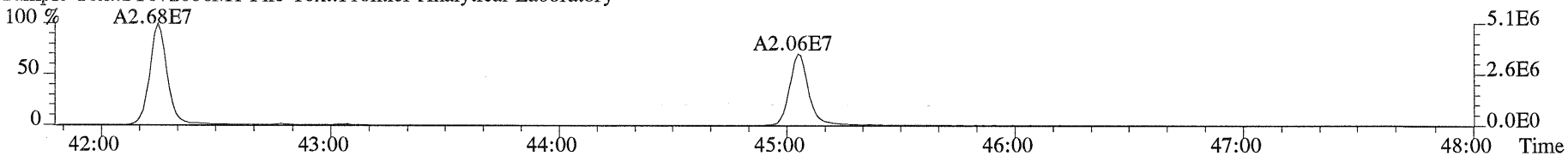
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



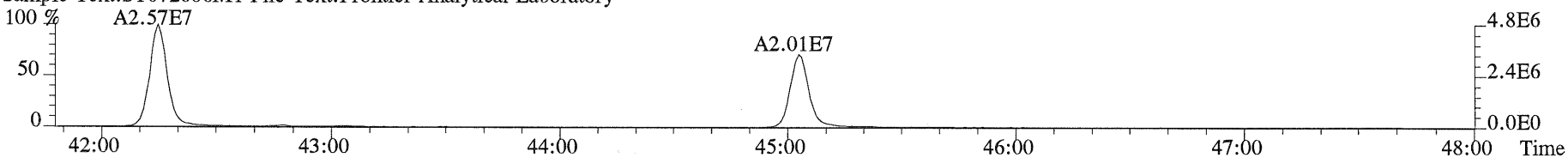
File:26JUL06M #1-463 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



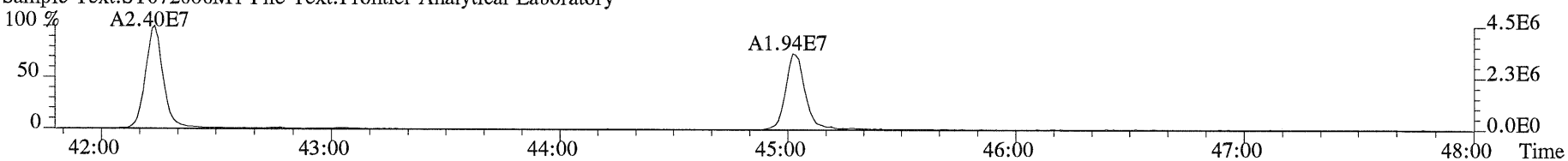
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



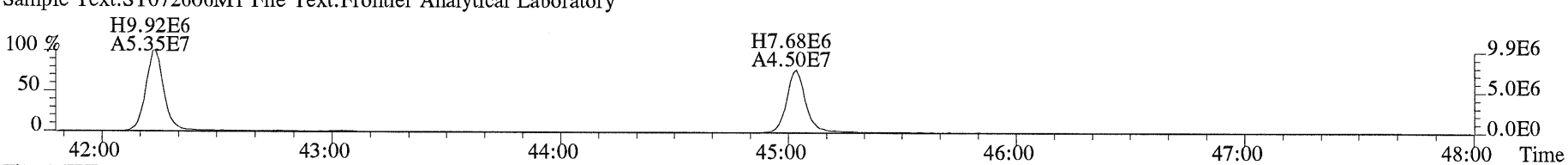
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



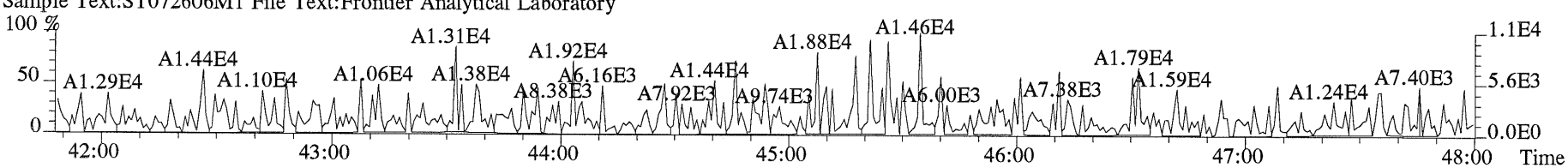
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



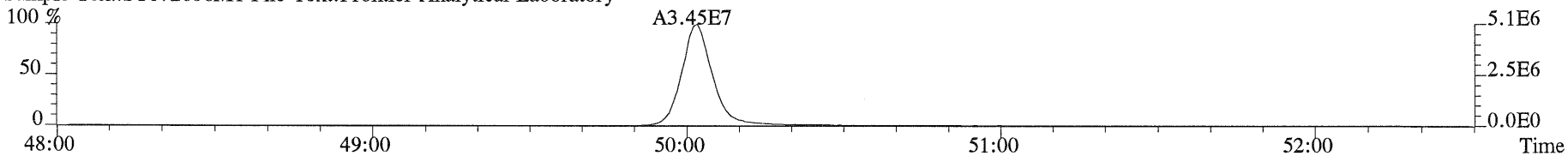
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



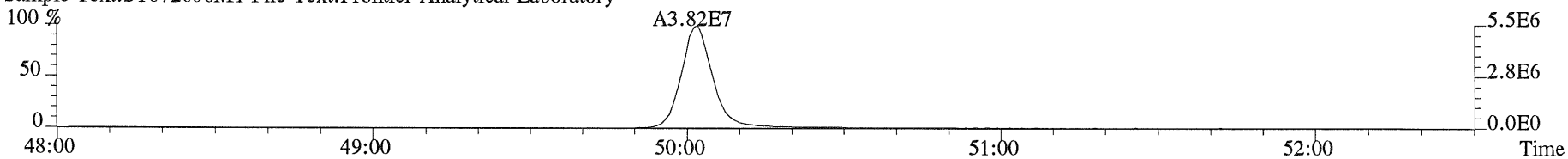
File:26JUL06M #1-541 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



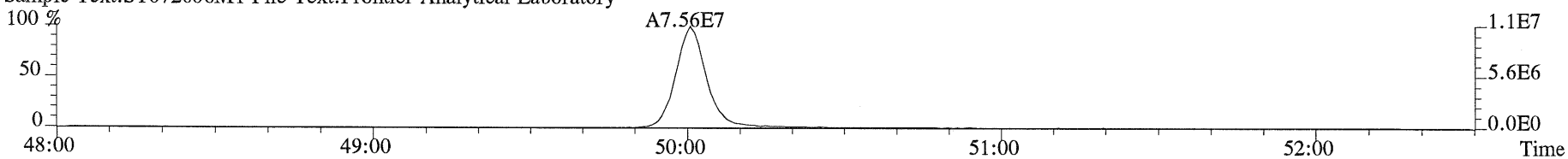
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



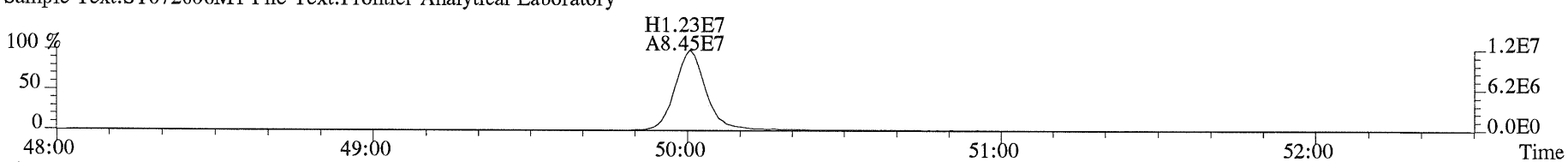
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



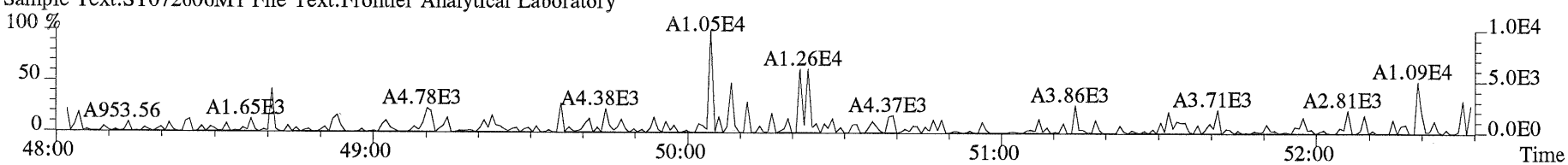
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory



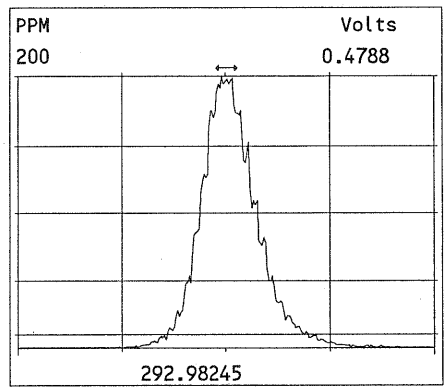
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory

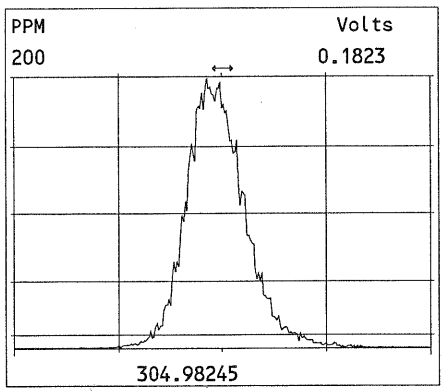


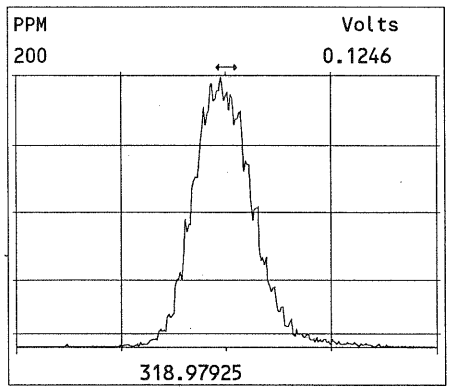
File:26JUL06M #1-347 Acq:26-JUL-2006 17:34:24 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M1 File Text:Frontier Analytical Laboratory

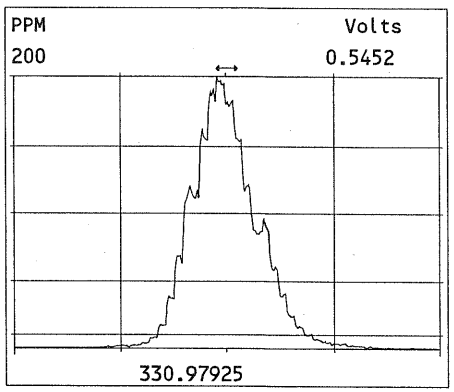


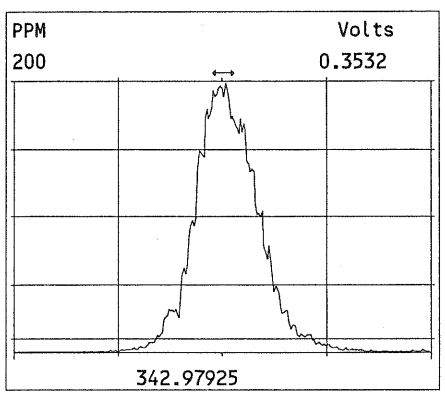
Peak Locate Examination:27-JUL-2006:03:45 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

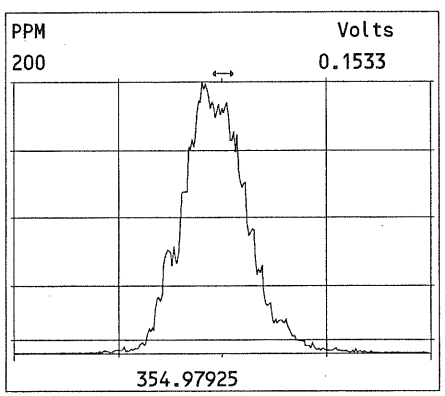


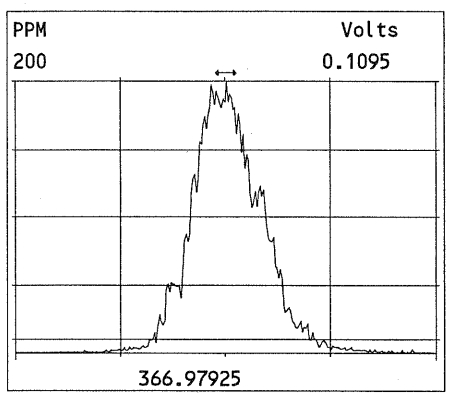


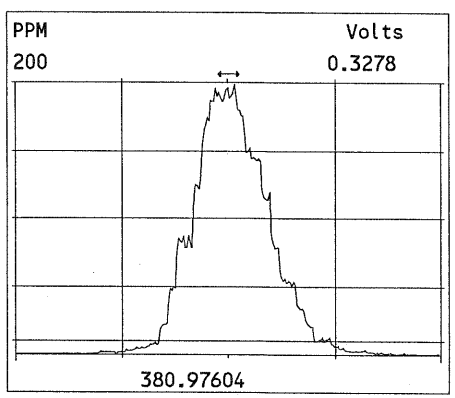


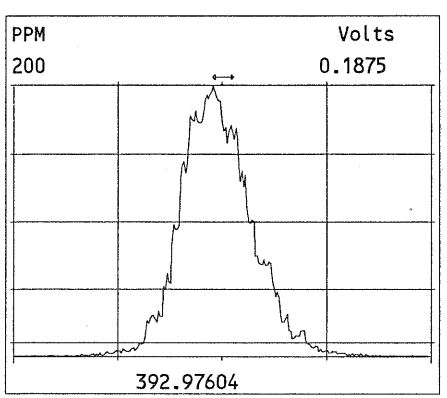


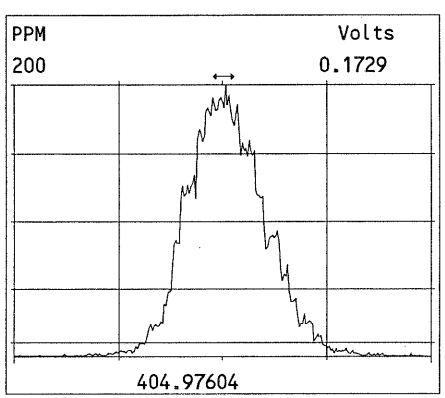


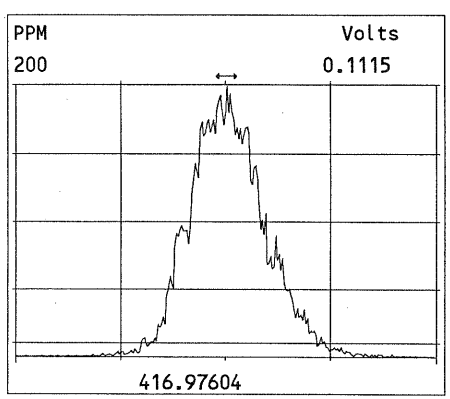




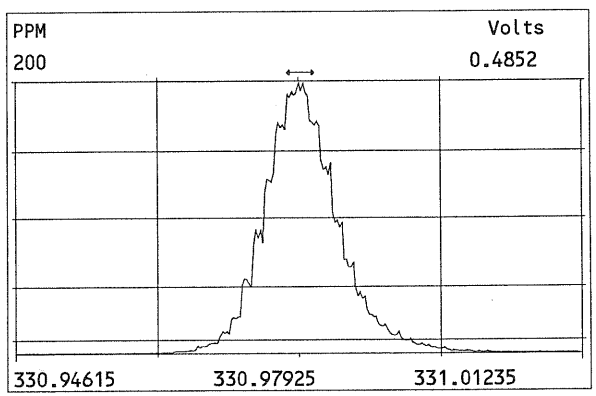


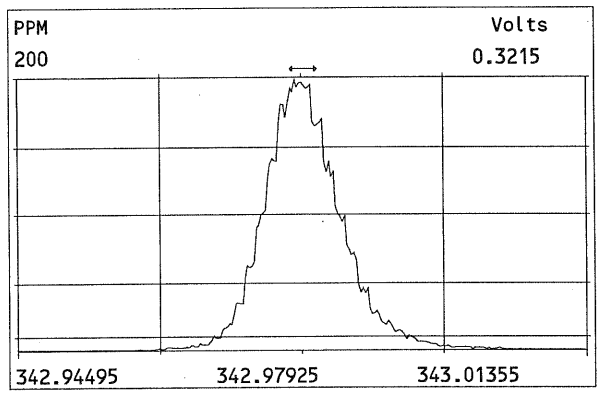


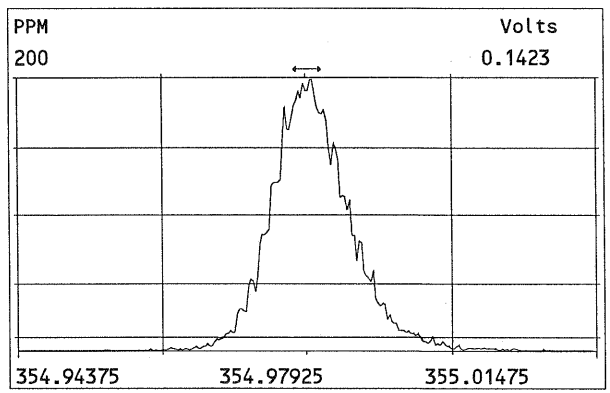


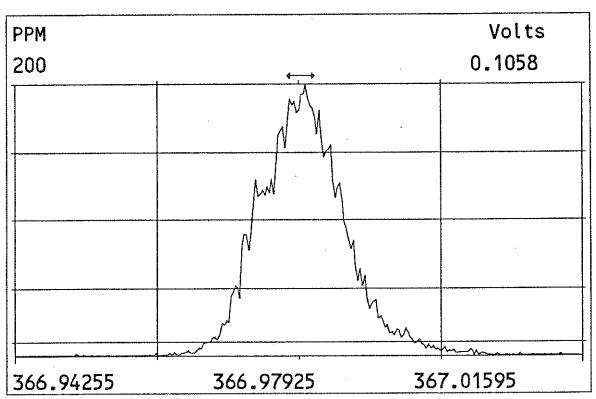


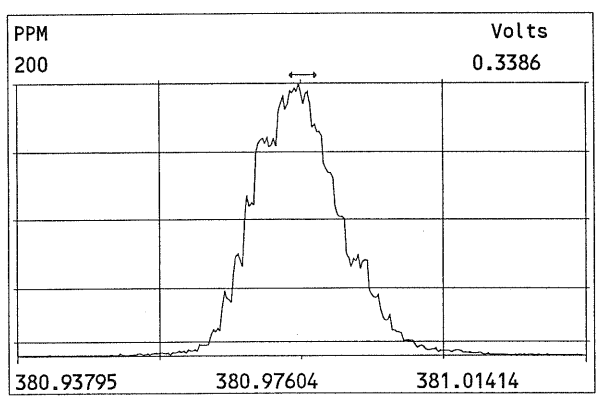
Peak Locate Examination:27-JUL-2006:03:47 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

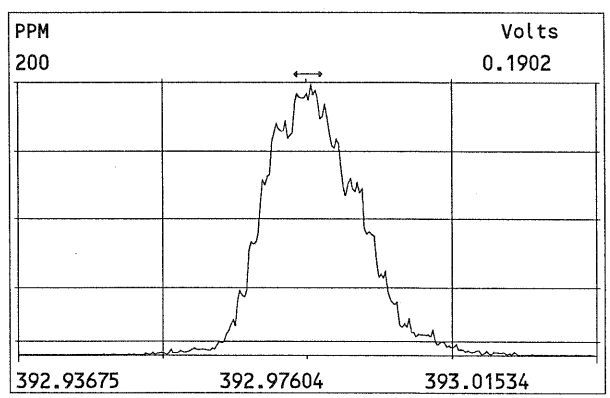


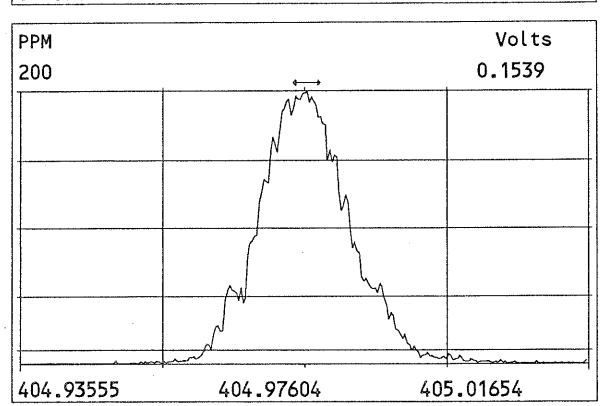


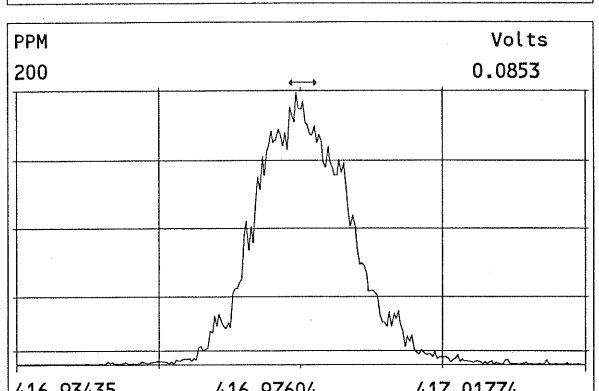




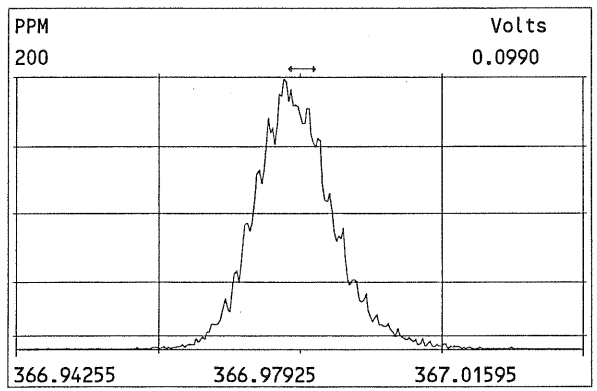


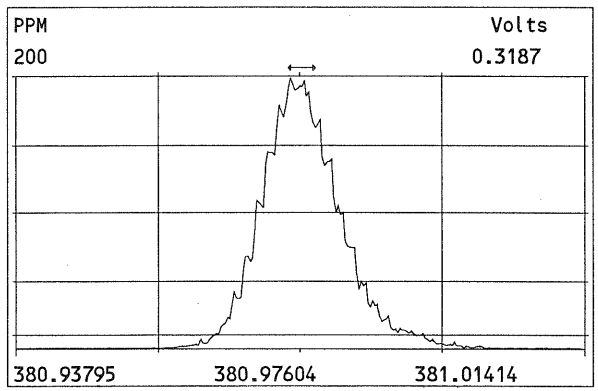


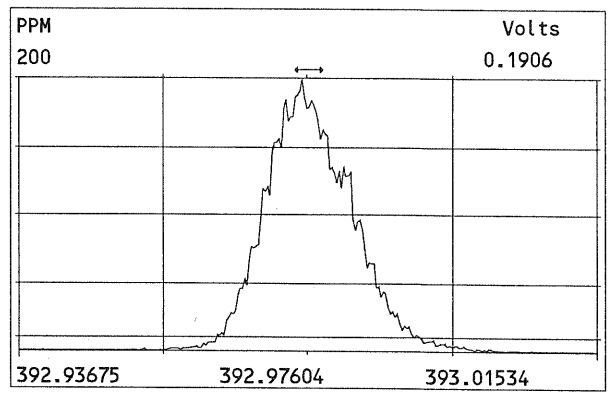


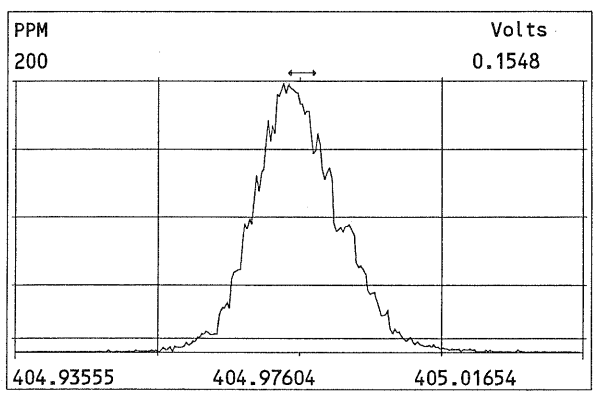


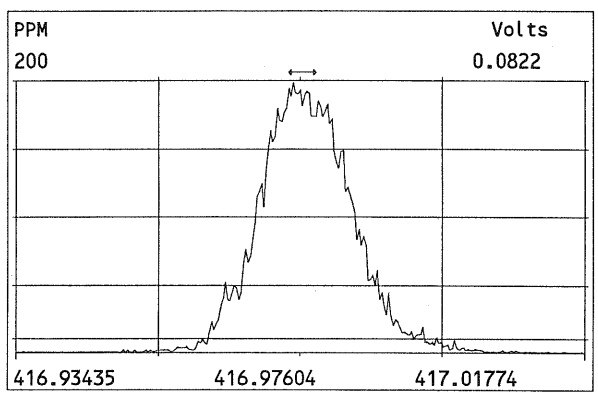
Peak Locate Examination:27-JUL-2006:03:49 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

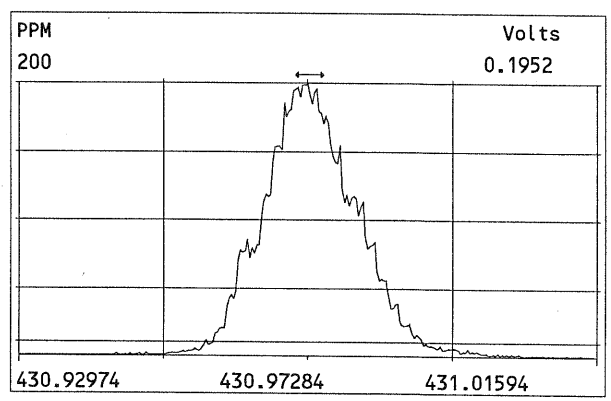


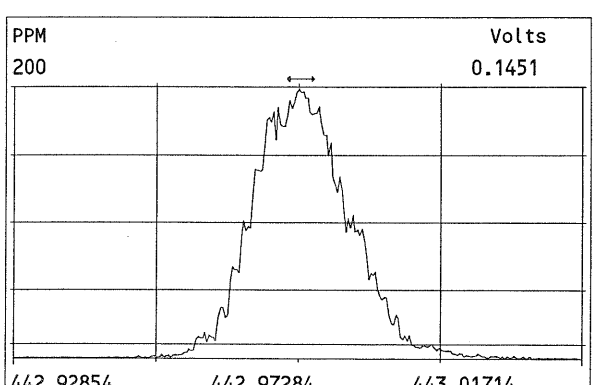


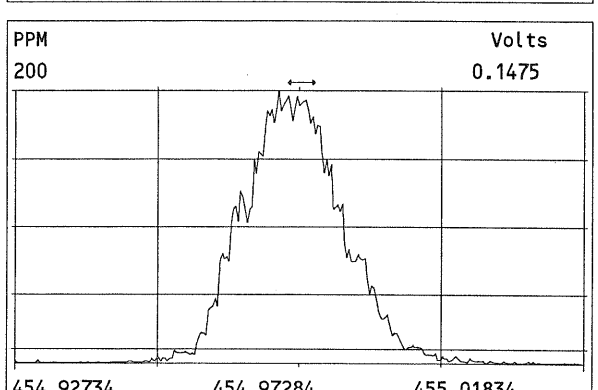




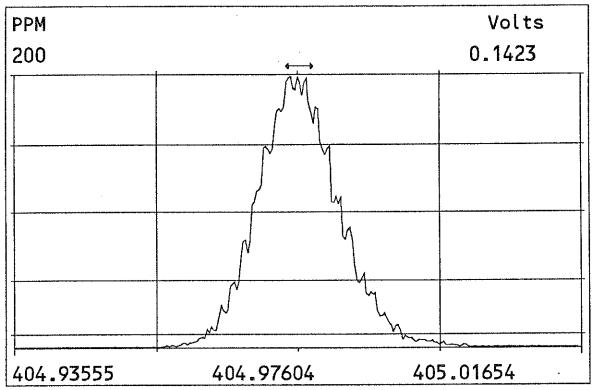


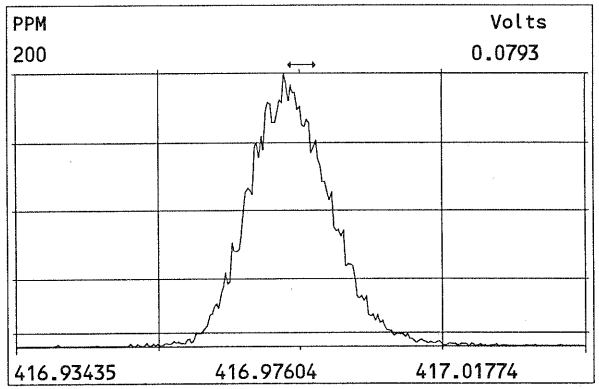


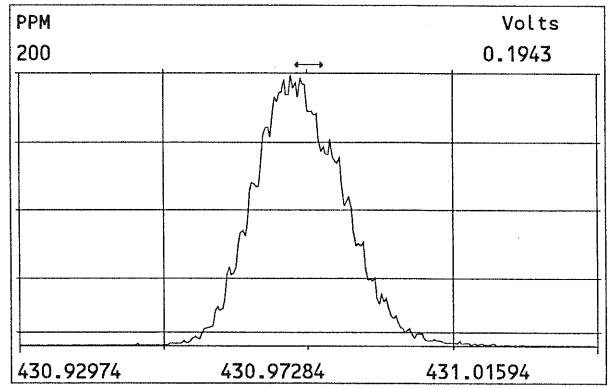


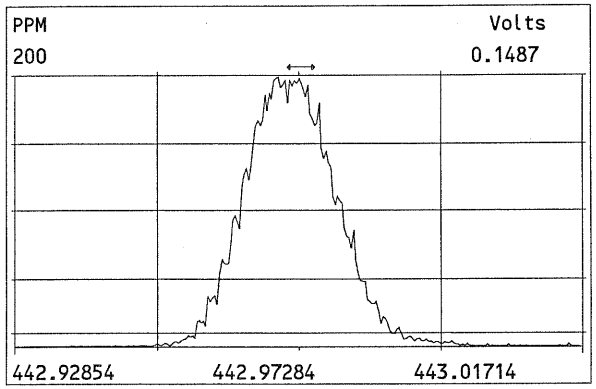


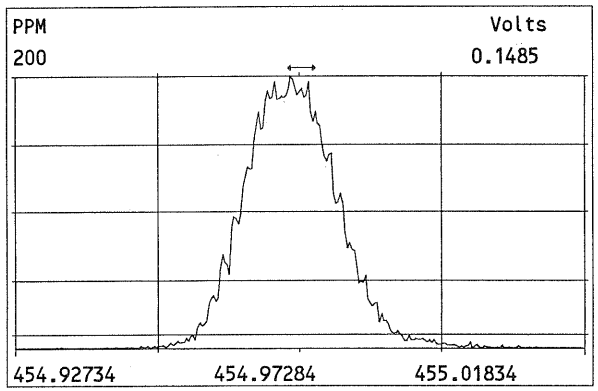
Peak Locate Examination:27-JUL-2006:03:51 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

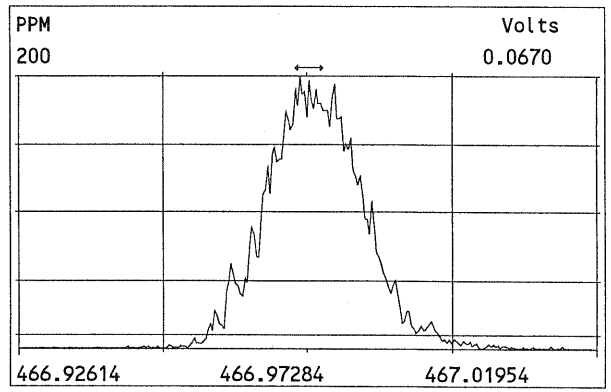


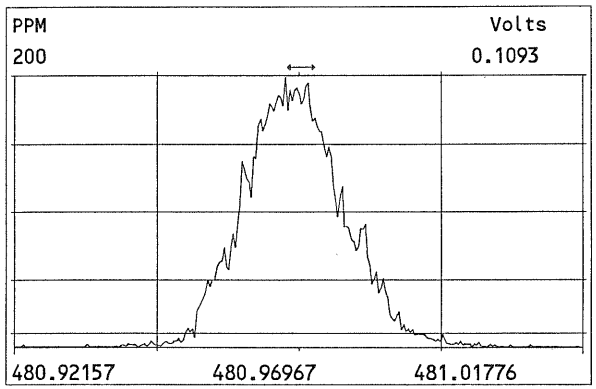




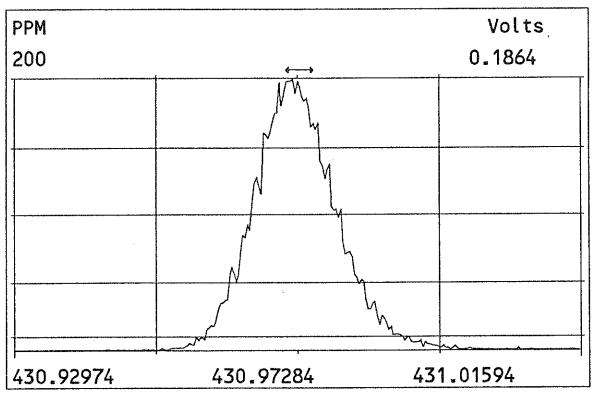


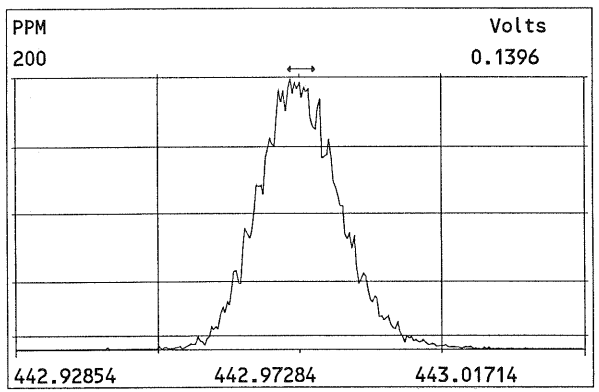


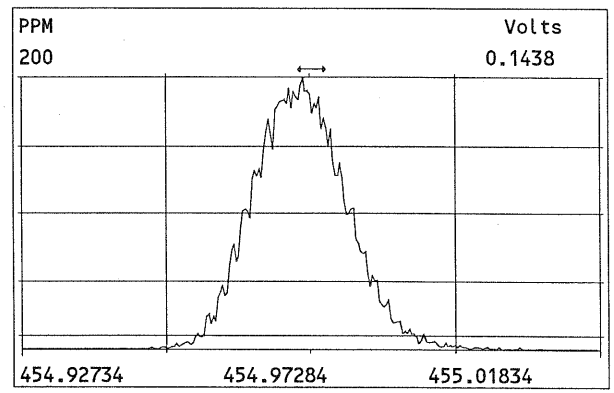


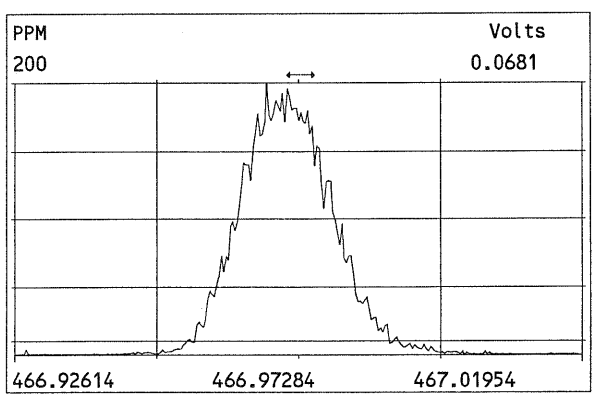


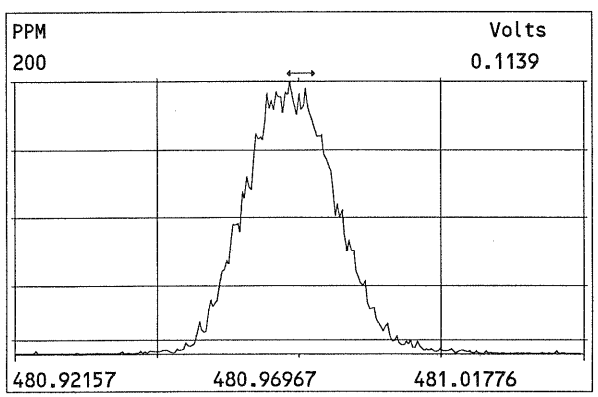
Peak Locate Examination:27-JUL-2006:03:53 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

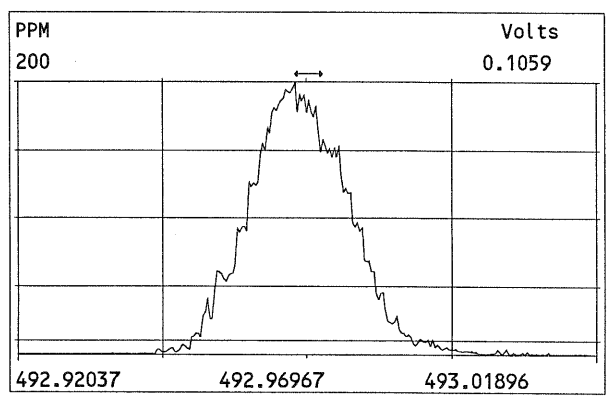


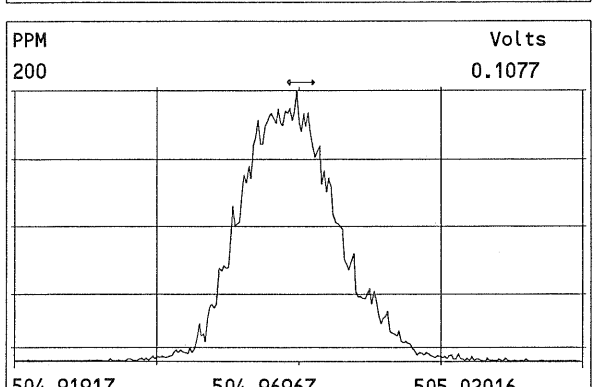


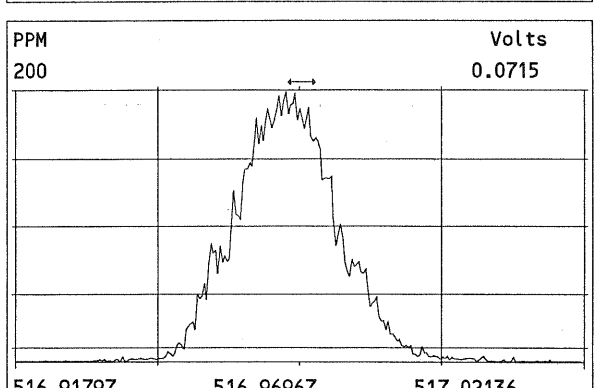












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 26JUL06M Sam:11 Analysis Date: 27-JUL-06 02:48:08

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	9.32	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	48.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	y	48.0	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	y	48.5	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.19	1.05-1.43	y	46.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	51.2	43.0 - 58.0
OCDD	M+2/M+4	0.90	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	y	8.77	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	50.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	49.5	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	48.4	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	52.4	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	50.2	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	y	51.3	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	53.4	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	52.0	43.0 - 58.0
OCDF	M+2/M+4	0.91	0.76-1.02	y	101	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: DPN Date: 7/27/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 26JUL06M Sam:11 Analysis Date: 27-JUL-06 02:48:08

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	y	93.9	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32-1.78	y	82.1	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	y	94.3	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	101	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	80.6	72.0 - 138
13C-OCDD	M+2/M+4	0.89	0.76-1.02	y	179	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	95.8	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	y	82.3	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	83.6	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	94.0	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	89.5	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	91.0	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43-0.59	y	84.5	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	79.3	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	79.4	77.0 - 129
13C-OCDF	M+2/M+4	0.89	0.76-1.02	y	170	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.23	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: BAJ Date: 7/27/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 26JUL06M Sam:11 Analysis Date: 27-JUL-06 Time: 02:48:08

DB-5 IS Data Filename: 26JUL06M Sam:11 Analysis Date: 27-JUL-06 Time: 02:48:08

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:25	1,3,6,8-TCDF (F)	23:04
1,2,8,9-TCDD (L)	28:22	1,2,8,9-TCDF (L)	28:35
1,2,4,7,9-PeCDD (F)	30:16	1,3,4,6,8-PeCDF (F)	28:26
1,2,3,8,9-PeCDD (L)	33:48	1,2,3,8,9-PeCDF (L)	34:13
1,2,4,6,7,9-HxCDD (F)	36:07	1,2,3,4,6,8-HxCDF (F)	35:14
1,2,3,7,8,9-HxCDD (L)	39:10	1,2,3,7,8,9-HxCDF (L)	39:45
1,2,3,4,6,7,9-HpCDD (F)	42:46	1,2,3,4,6,7,8-HpCDF (F)	42:15
1,2,3,4,6,7,8-HpCDD (L)	44:09	1,2,3,4,7,8,9-HpCDF (L)	45:03

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: DPV Date: 7/27/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 02:48:08 CS3 or VER Data Filename: 26JUL06M Sam:11

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.238	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.174	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.222	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DN Date: 7/27/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 02:48:08 CS3 or VER Data Filename: 26JUL06M Sam:11

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.001	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.000	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.000	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.989	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.127	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.150	1.057-1.154
13C-OCDD		1.268	1.032-1.311
13C-OCDF		1.277	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: DN Date: 7/27/06

FAL ID: ST072606M2 Filename: 26JUL06M Sam:11 Acquired: 27-JUL-06 02:48:08 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072606M1 EndCal: ST072606M2
Results: 3967RI GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 97.9
WHO 1998 Tox: 122

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	6.69e+06	0.76 y	27:25	1.10	9.32		2.50	-	*	
1,2,3,7,8-PeCDD	2.38e+07	1.59 y	33:13	0.90	48.3		2.50	-	*	
1,2,3,4,7,8-HxCDD	1.57e+07	1.25 y	38:34	0.96	48.0		2.50	-	*	
1,2,3,6,7,8-HxCDD	1.76e+07	1.29 y	38:44	0.83	48.5		2.50	-	*	
1,2,3,7,8,9-HxCDD	1.41e+07	1.19 y	39:10	0.77	46.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	1.36e+07	1.04 y	44:09	0.86	51.2		2.50	-	*	
OCDD	2.24e+07	0.90 y	49:41	0.87	101		2.50	-	*	
2,3,7,8-TCDF	7.67e+06	0.75 y	26:40	0.99	8.77		2.50	-	*	
1,2,3,7,8-PeCDF	3.23e+07	1.55 y	31:29	0.80	50.1		2.50	-	*	
2,3,4,7,8-PeCDF	3.35e+07	1.59 y	32:48	0.88	49.5		2.50	-	*	
1,2,3,4,7,8-HxCDF	2.22e+07	1.26 y	37:11	1.42	48.4		2.50	-	*	
1,2,3,6,7,8-HxCDF	2.23e+07	1.26 y	37:22	0.97	52.4		2.50	-	*	
2,3,4,6,7,8-HxCDF	2.03e+07	1.24 y	38:19	1.26	50.2		2.50	-	*	
1,2,3,7,8,9-HxCDF	2.27e+07	1.29 y	39:45	1.34	51.3		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	1.87e+07	1.05 y	42:15	1.28	53.4		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	1.40e+07	1.03 y	45:03	1.22	52.0		2.50	-	*	
OCDF	2.52e+07	0.91 y	50:02	0.90	101		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	6.53e+07	0.79 y	27:24	1.00	93.9					93.9
13C-1,2,3,7,8-PeCDD	5.47e+07	1.57 y	33:11	0.96	82.1					82.1
13C-1,2,3,4,7,8-HxCDD	3.40e+07	1.23 y	38:32	0.90	94.3					94.3
13C-1,2,3,6,7,8-HxCDD	4.39e+07	1.28 y	38:43	1.09	101					101
13C-1,2,3,4,6,7,8-HpCDD	3.08e+07	1.04 y	44:08	0.96	80.6					80.6
13C-OCDD	5.08e+07	0.89 y	49:39	0.71	179					89.3
13C-2,3,7,8-TCDF	8.80e+07	0.78 y	26:39	0.94	95.8					95.8
13C-1,2,3,7,8-PeCDF	8.07e+07	1.57 y	31:28	1.00	82.3					82.3
13C-2,3,4,7,8-PeCDF	7.73e+07	1.55 y	32:47	0.94	83.6					83.6
13C-1,2,3,4,7,8-HxCDF	3.23e+07	0.52 y	37:09	0.86	94.0					94.0
13C-1,2,3,6,7,8-HxCDF	4.39e+07	0.51 y	37:21	1.23	89.5					89.5
13C-2,3,4,6,7,8-HxCDF	3.21e+07	0.52 y	38:17	0.88	91.0					91.0
13C-1,2,3,7,8,9-HxCDF	3.31e+07	0.51 y	39:43	0.98	84.5					84.5
13C-1,2,3,4,6,7,8-HpCDF	2.73e+07	0.44 y	42:14	0.86	79.3					79.3
13C-1,2,3,4,7,8,9-HpCDF	2.22e+07	0.44 y	45:02	0.70	79.4					79.4
13C-OCDF	5.56e+07	0.89 y	50:01	0.82	170					85.0
37Cl-2,3,7,8-TCDD	4.64e+06		27:25	0.81	8.23					82.3
13C-1,2,3,4-TCDD	6.97e+07	0.80 y	26:49	-	36.4					
13C-1,2,3,4-TCDF	9.80e+07	0.77 y	25:34	-	34.1					
13C-1,2,3,7,8,9-HxCDD	3.99e+07	1.24 y	39:09	-	26.7					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	2.84e+07		23:17	1.10	39.5		2.50	-	*	28
Total Penta-Dioxins	6.46e+07		30:16	0.90	131		2.50	-	*	22
Total Hexa-Dioxins	6.90e+07		36:07	0.85	208		2.50	-	*	28
Total Hepta-Dioxins	2.75e+07		41:17	0.86	104		2.50	-	*	43
Total Tetra-Furans	2.97e+07		23:04	0.99	33.9		2.50	-	*	25
1st Fn. Tot Penta-Furans	3.57e+07		28:26	0.84	54.0		2.50	-	*	3 PeCDF
Total Penta-Furans	9.04e+07		30:11	0.84	137		2.50	-	*	24 191
Total Hexa-Furans	1.17e+08		35:14	1.22	270		2.50	-	*	28
Total Hepta-Furans	4.22e+07		41:16	1.25	136		2.50	-	*	40

Analyst: DDJ Date: 7/27/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:26JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

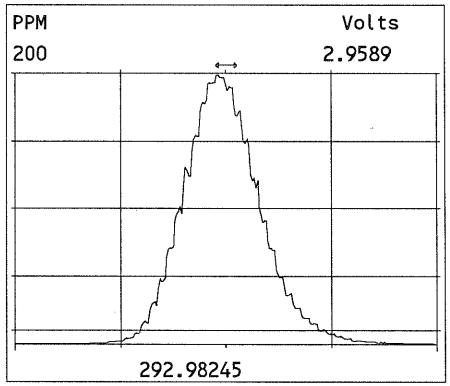
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
26JUL06M	1	ST072606M1	1613 CS3 (051212J)	26-JUL-06 17:34:24	ST072606M1	ST072606M2	
26JUL06M	2	SB072606M1	Solvent Blank	26-JUL-06 18:29:51	ST072606M1	ST072606M2	
26JUL06M	3	3673-001-0001-SA	WS -114	26-JUL-06 19:25:15	ST072606M1	ST072606M2	
26JUL06M	4	3659-001-0001-SA	WS -120	26-JUL-06 20:20:34	ST072606M1	ST072606M2	
26JUL06M	5	SB072606M2	Solvent Blank	26-JUL-06 21:15:49	ST072606M1	ST072606M2	
26JUL06M	6	3967-001-0001-SA	C-4, S-1 (1:10 DIL)	26-JUL-06 22:11:13	ST072606M1	ST072606M2	
26JUL06M	7	3968-001-0001-SA	STC-1 (1:10 DIL)	26-JUL-06 23:06:37	ST072606M1	ST072606M2	
26JUL06M	8	3968-003-0001-SA	STC-3 (1:20 DIL)	27-JUL-06 00:02:01	ST072606M1	ST072606M2	
26JUL06M	9	SB072606M3	Solvent Blank	27-JUL-06 00:57:25	ST072606M1	ST072606M2	
26JUL06M	10	SB072606M4	Solvent Blank	27-JUL-06 01:52:49	ST072606M1	ST072606M2	
26JUL06M	11	ST072606M2	1613 CS3 (051212J)	27-JUL-06 02:48:08	ST072606M1	ST072606M2	

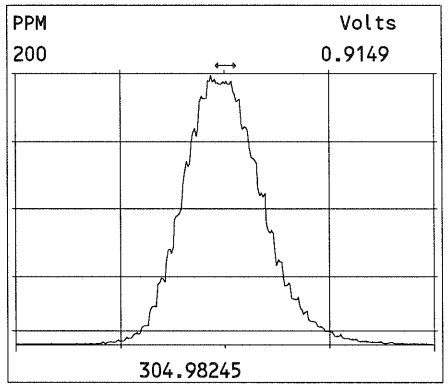
DN 7/27/06

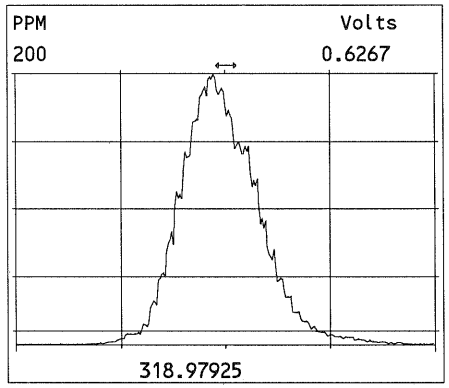
Data Backed Up:_____

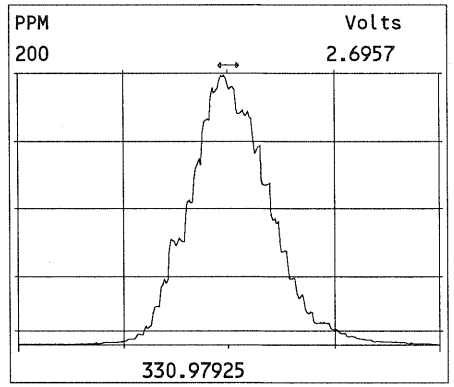
Date:_____

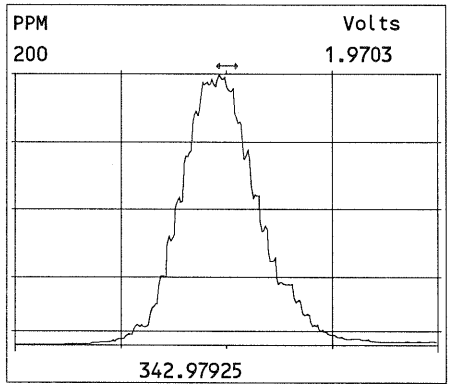
Peak Locate Examination:26-JUL-2006:17:32 File:26JUL06M
Experiment:PCDD Function:1 Reference:PFK

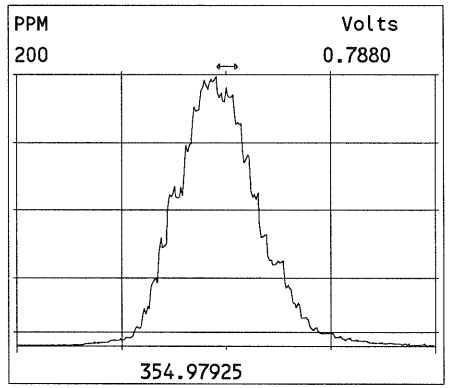


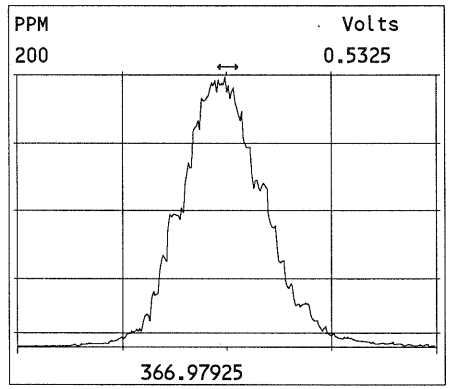


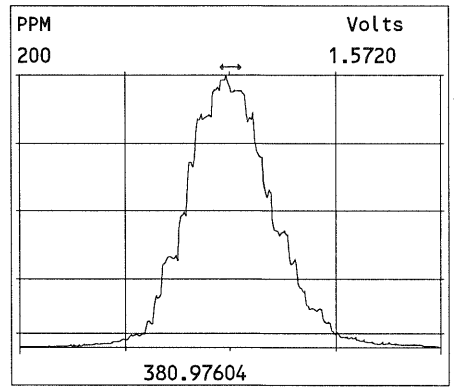


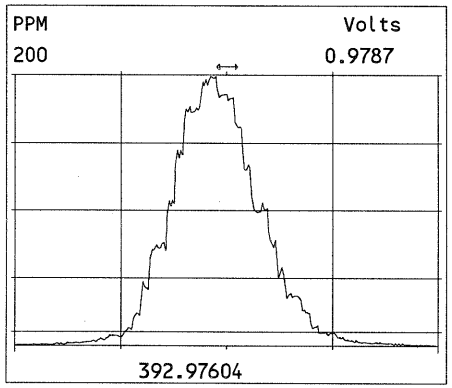


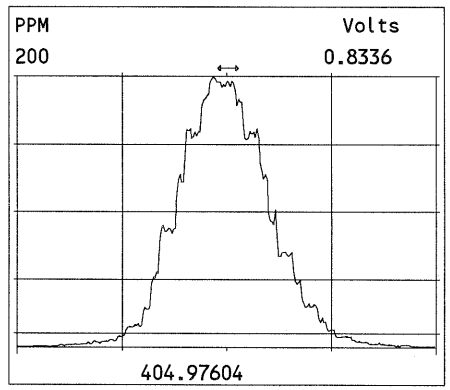


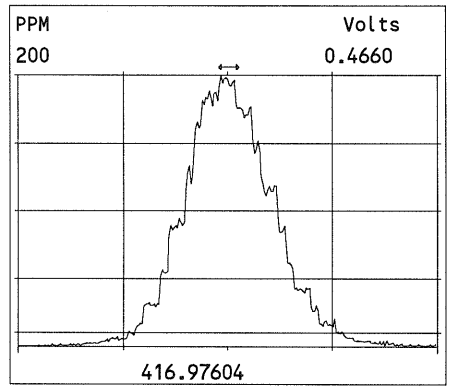






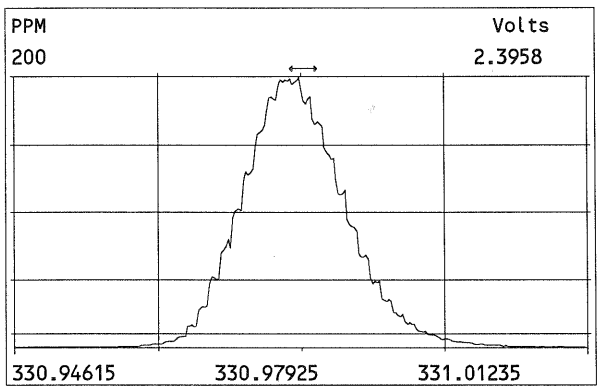


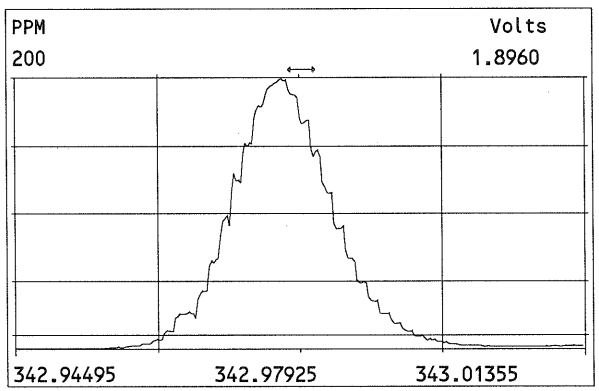


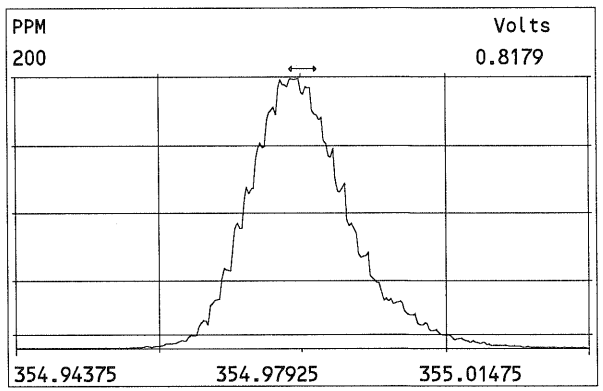


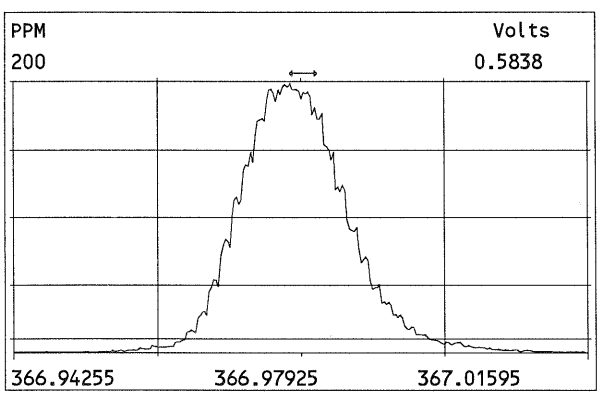
705

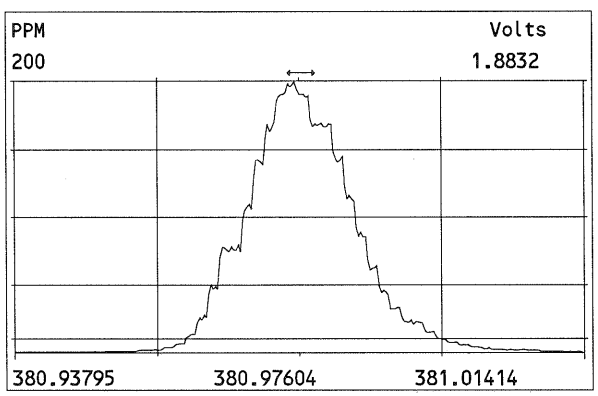
Peak Locate Examination:26-JUL-2006:17:32 File:26JUL06M
Experiment:PCDD Function:2 Reference:PFK

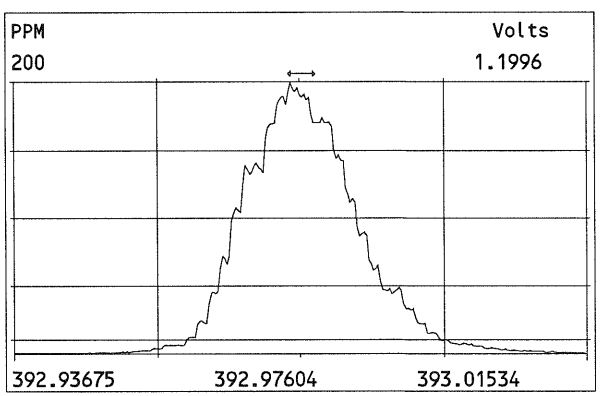


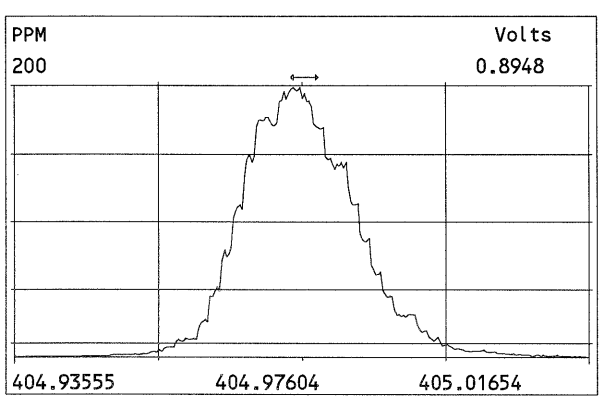


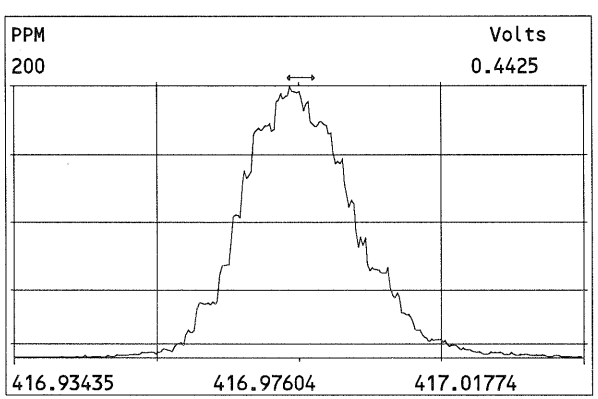




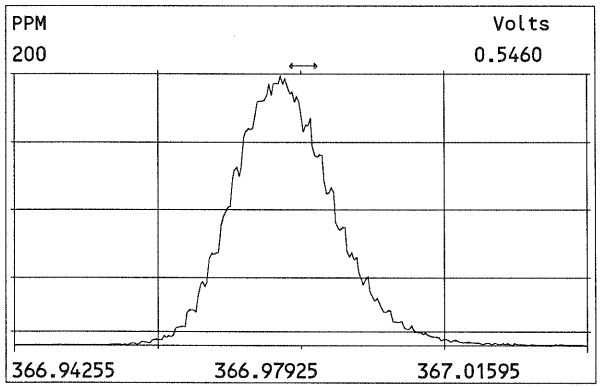


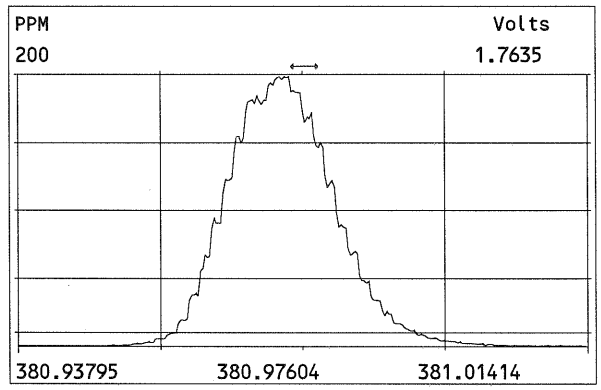


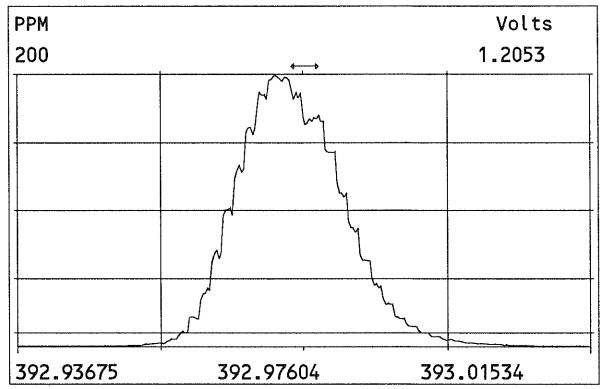


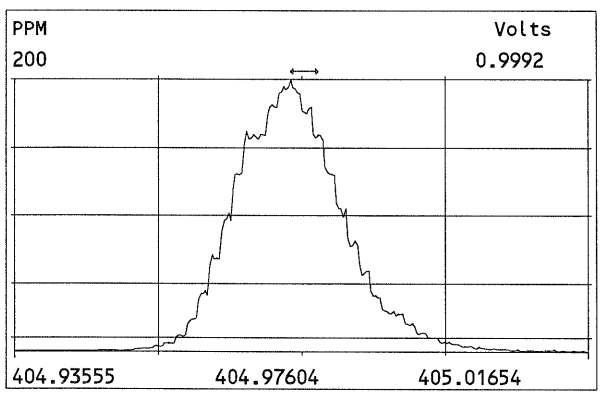


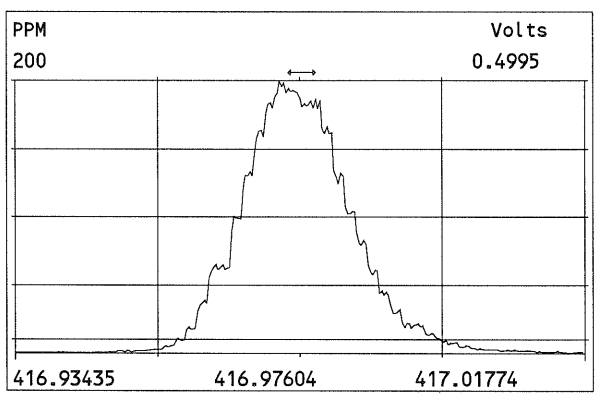
Peak Locate Examination:26-JUL-2006:17:33 File:26JUL06M
Experiment:PCDD Function:3 Reference:PFK

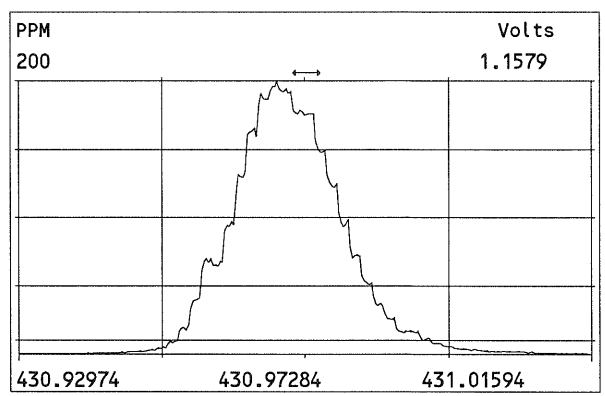


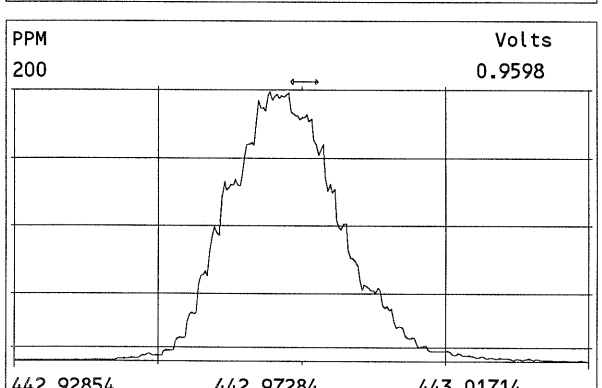


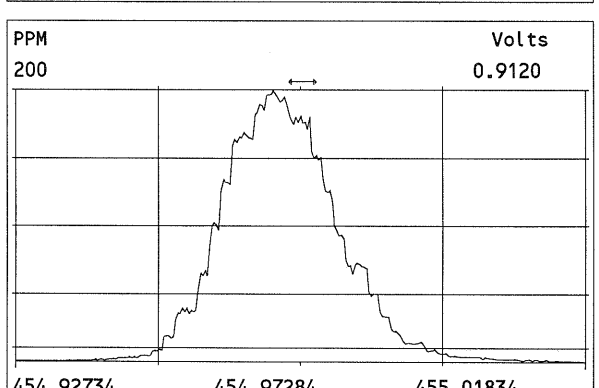




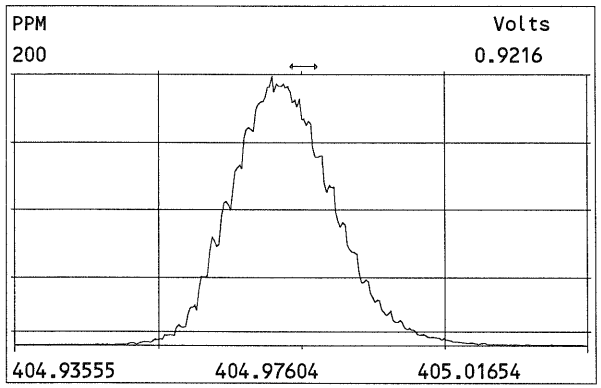


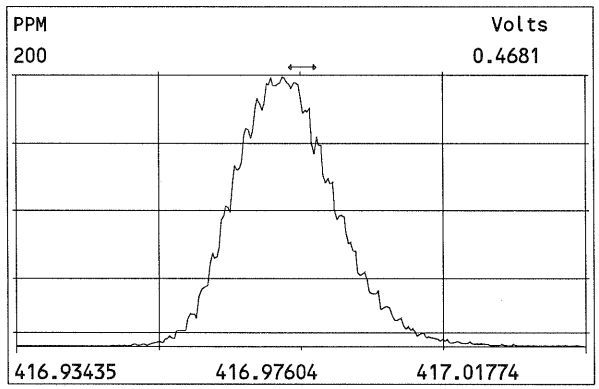


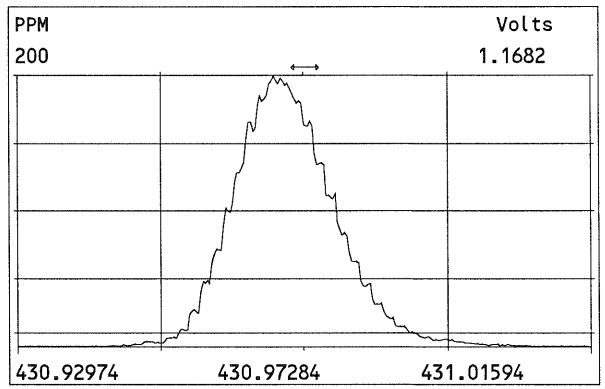


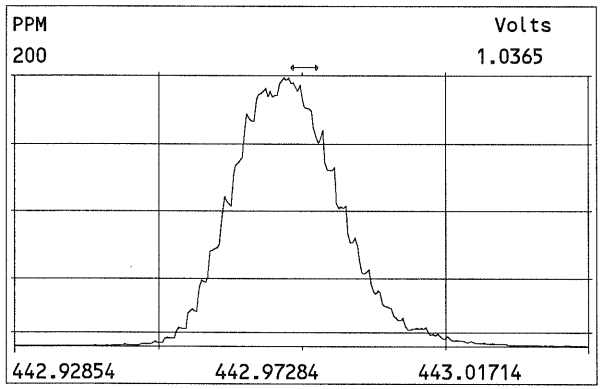


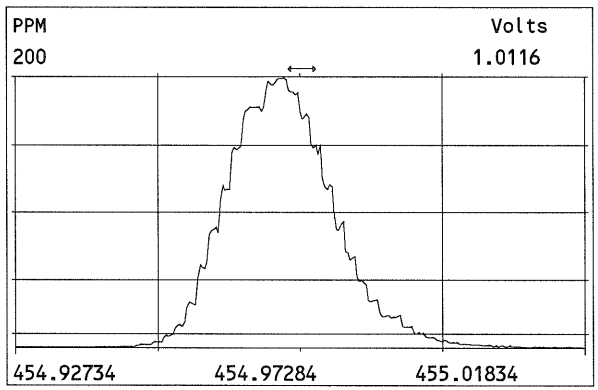
Peak Locate Examination:26-JUL-2006:17:33 File:26JUL06M
Experiment:PCDD Function:4 Reference:PFK

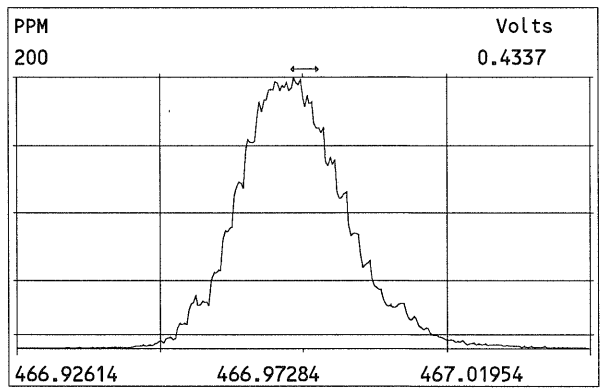


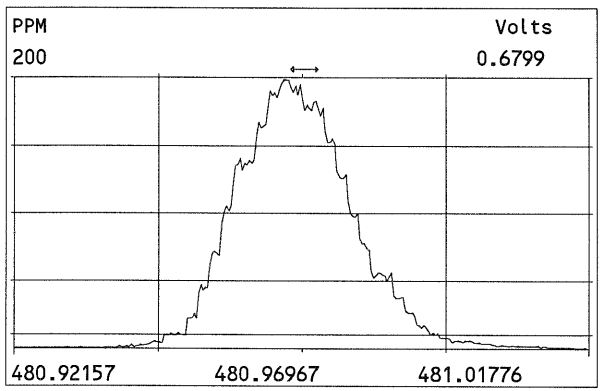






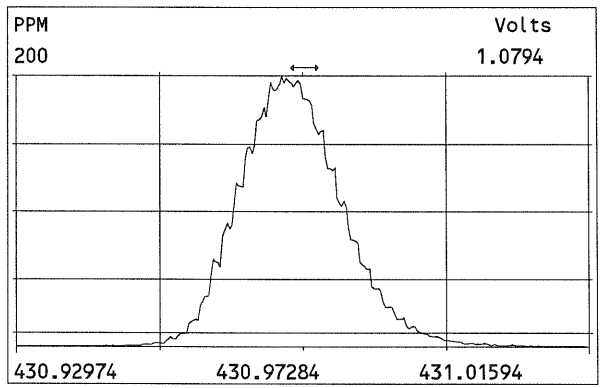


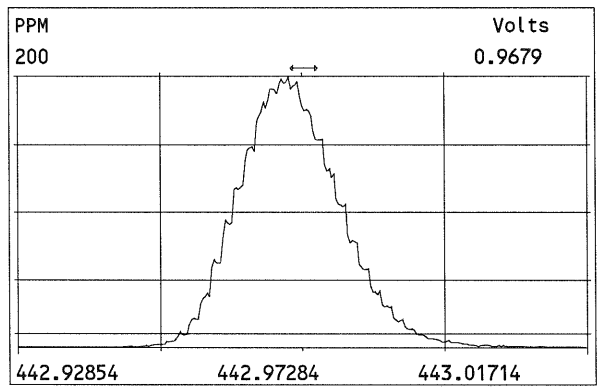


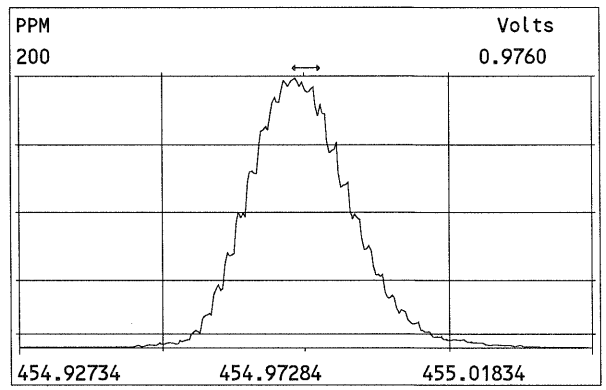


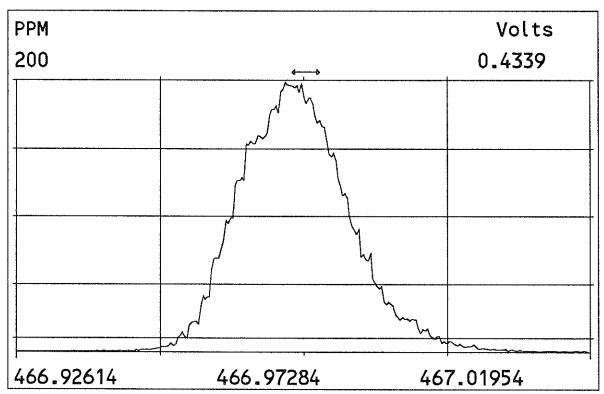
708

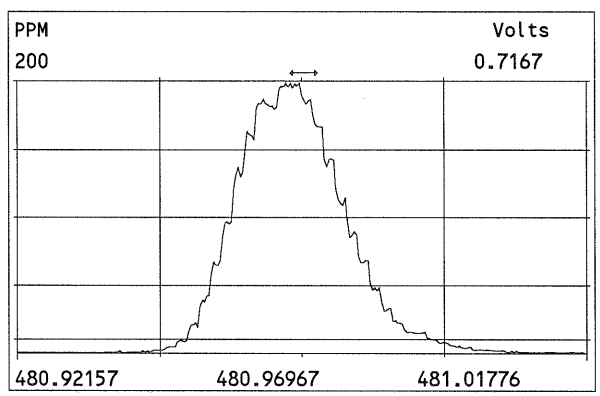
Peak Locate Examination:26-JUL-2006:17:34 File:26JUL06M
Experiment:PCDD Function:5 Reference:PFK

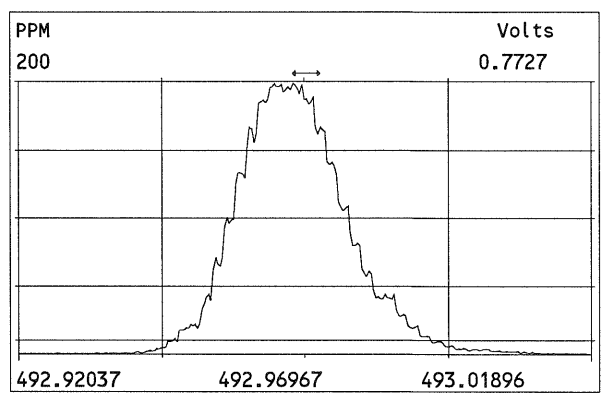


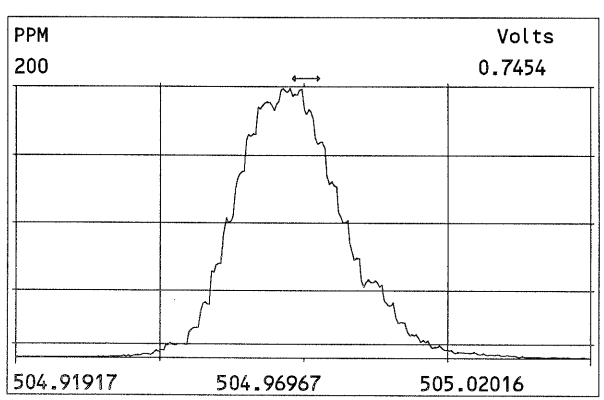


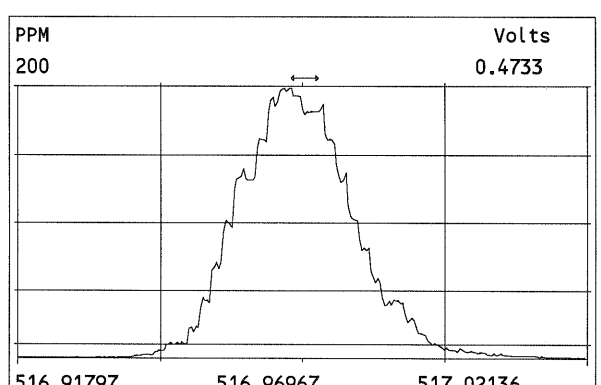




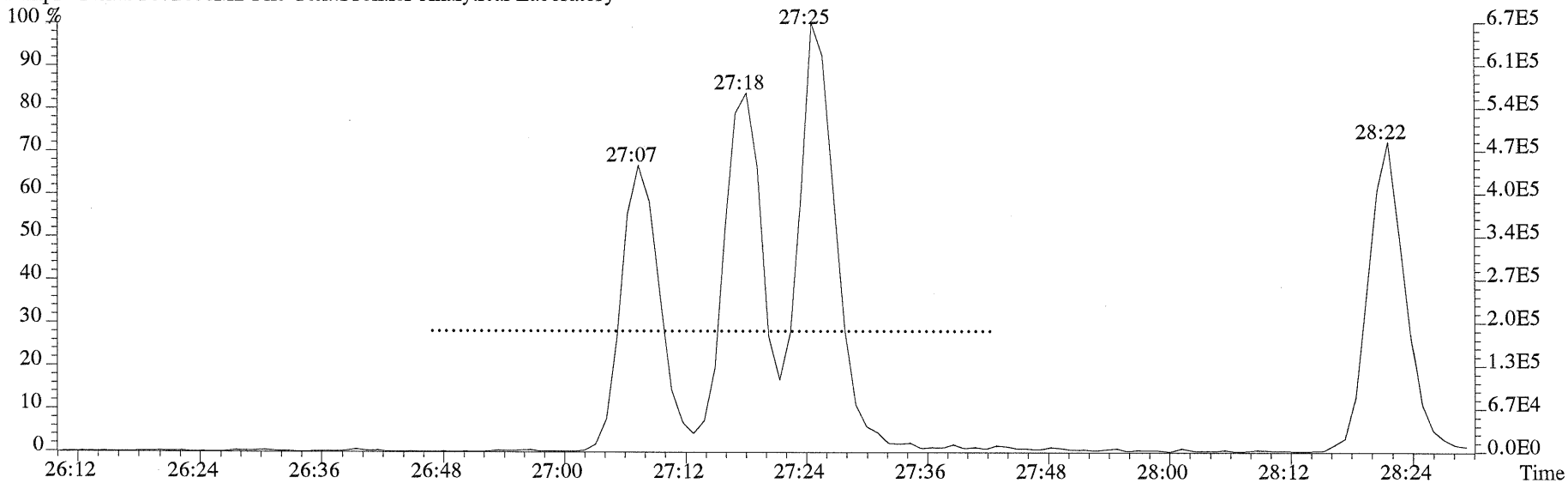




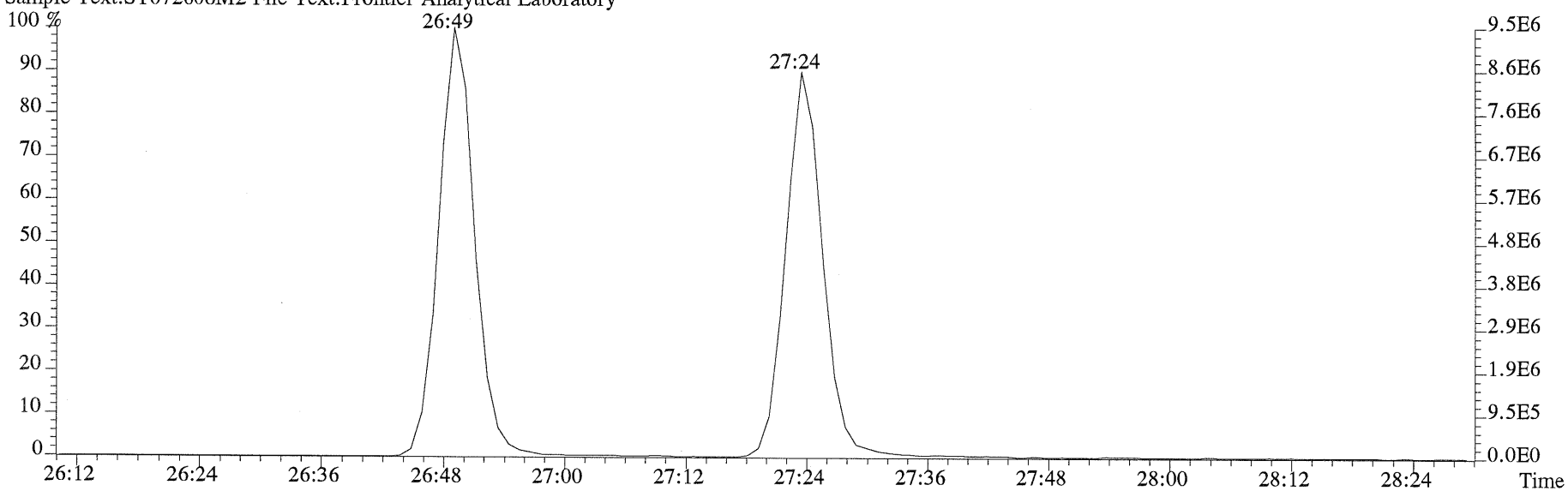




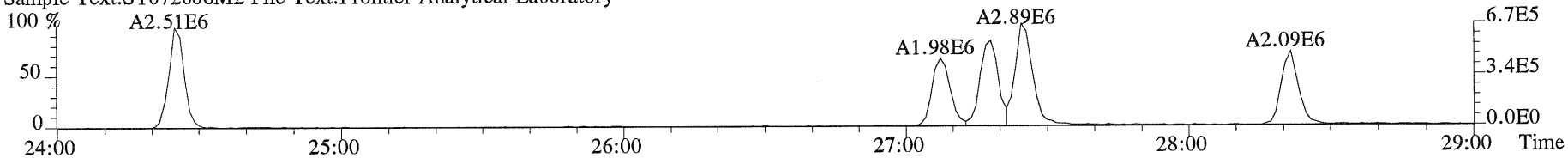
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:11 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



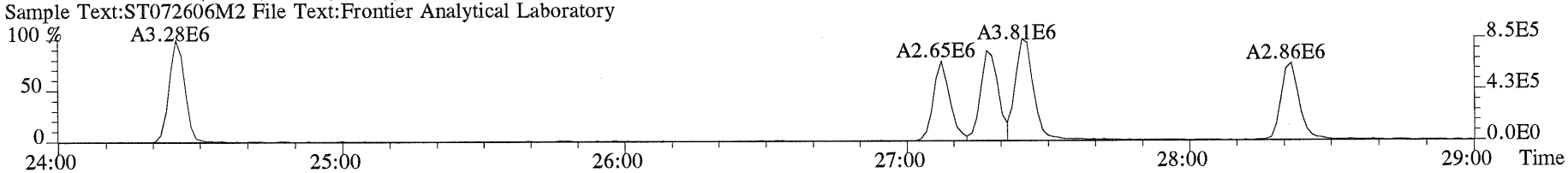
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:11 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



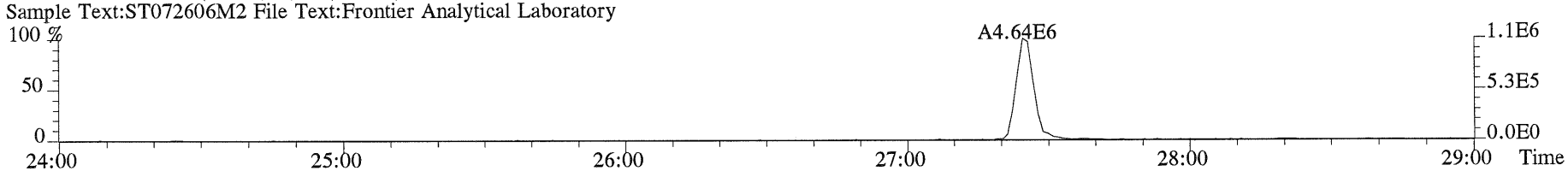
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



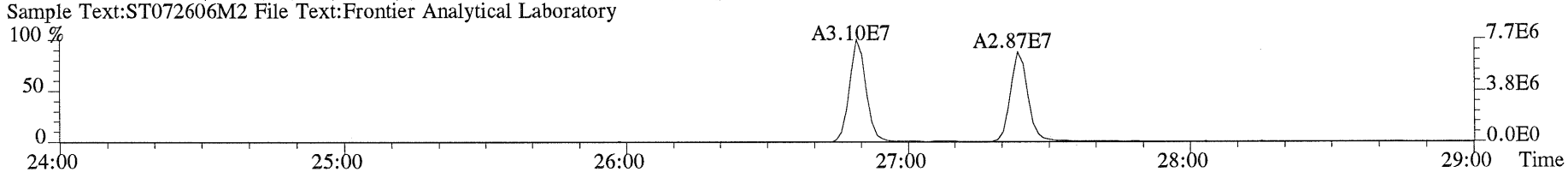
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



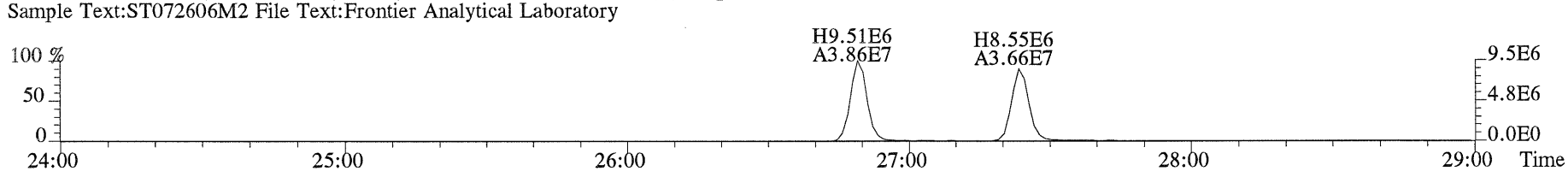
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory

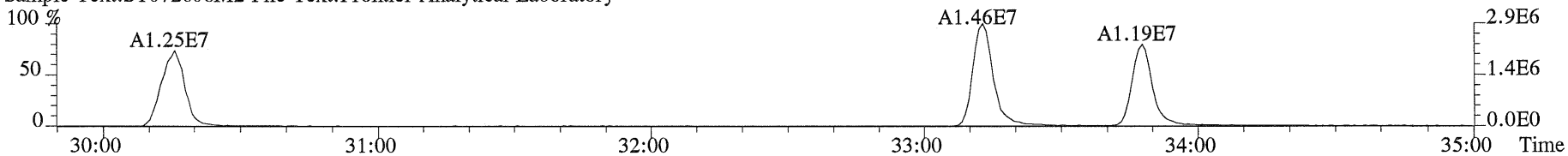


File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory

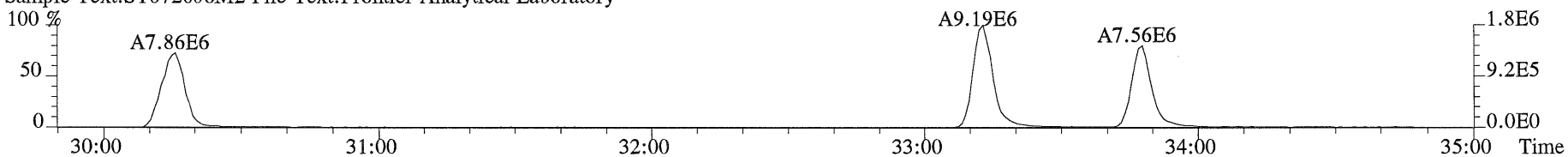


Klamath River Sediment Study

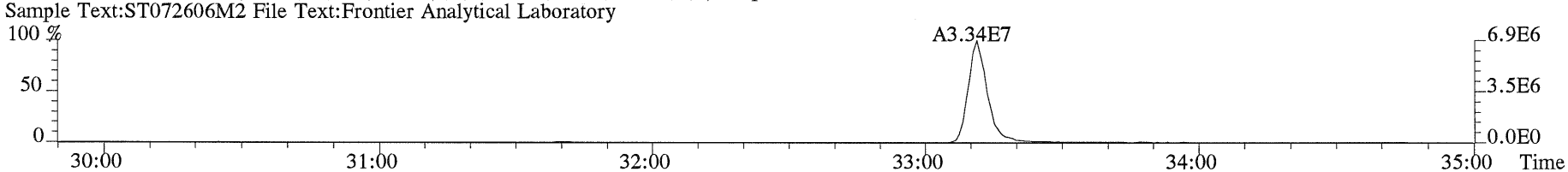
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



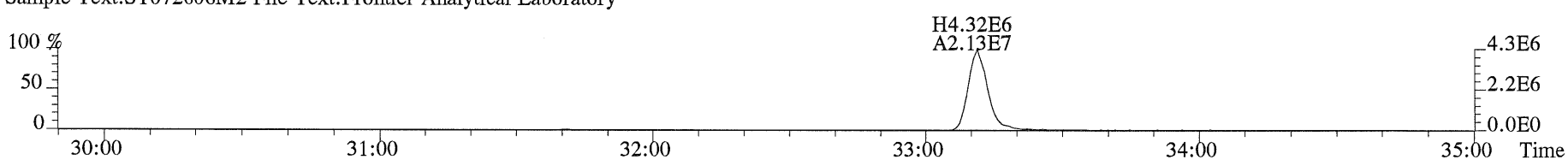
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



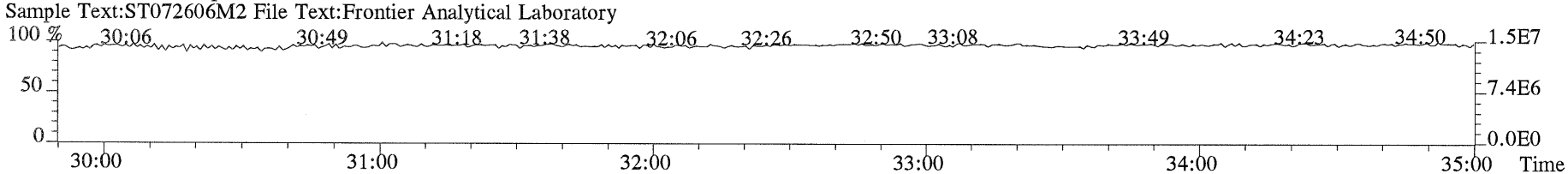
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



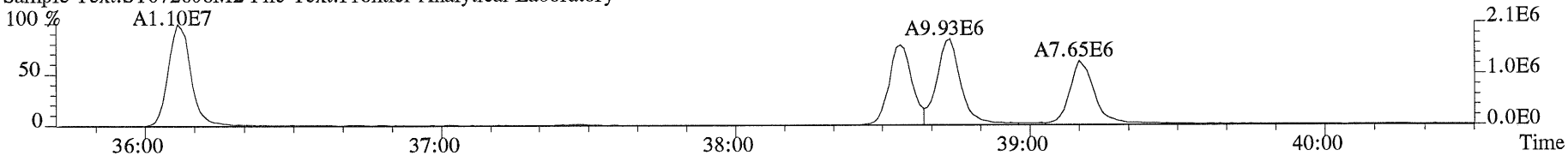
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



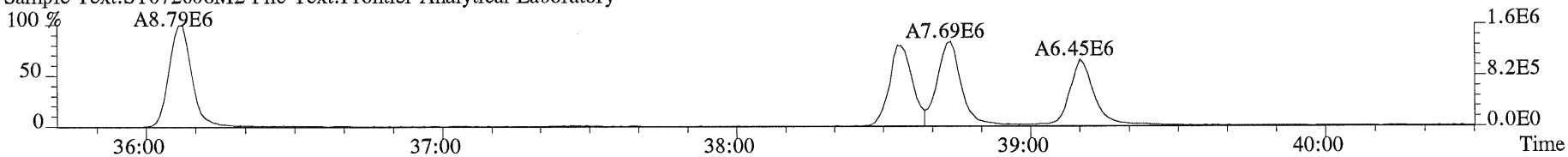
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:11 F:2 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



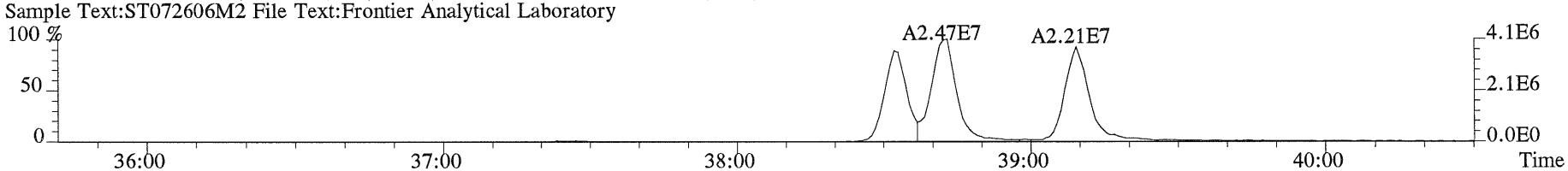
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



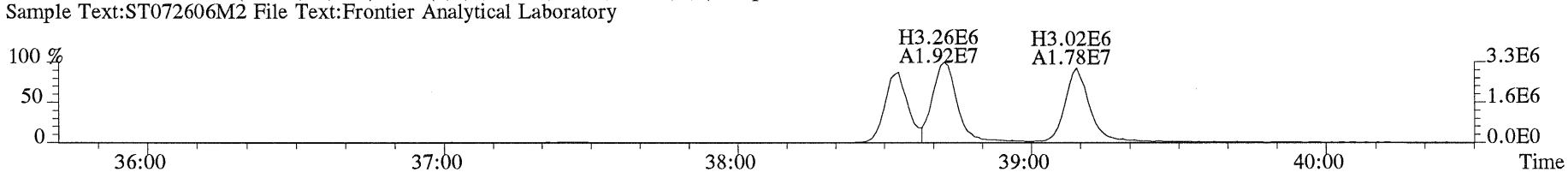
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



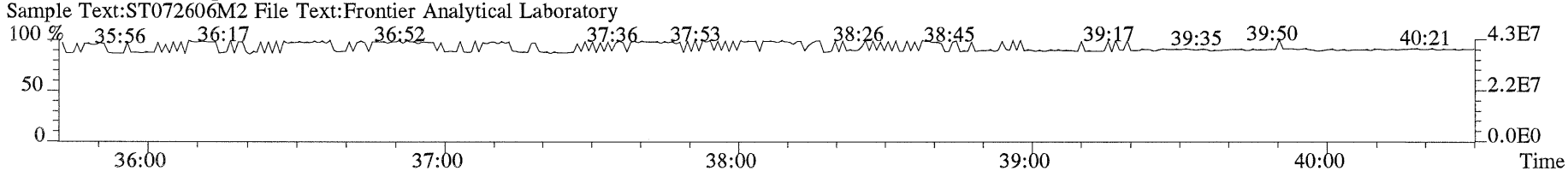
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



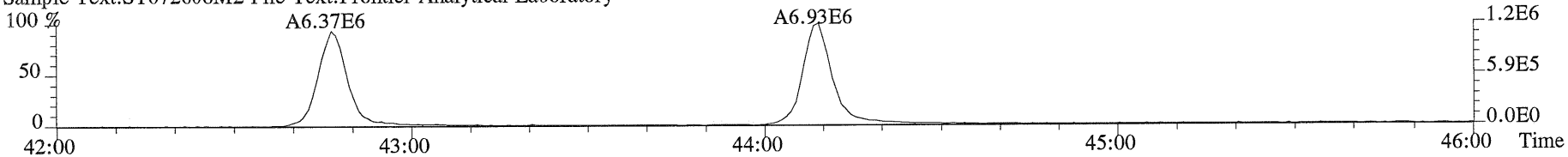
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



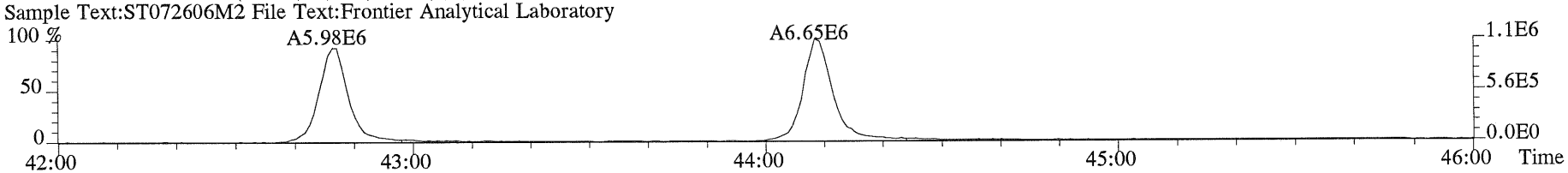
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:11 F:3 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



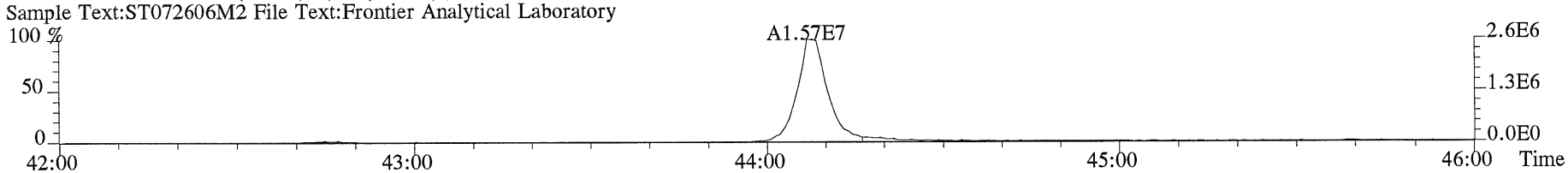
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



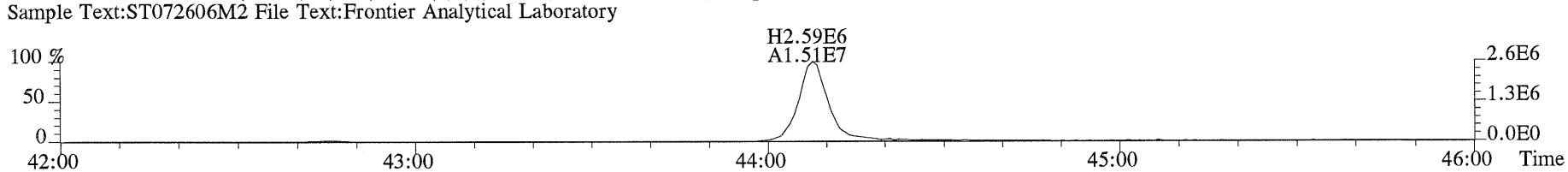
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



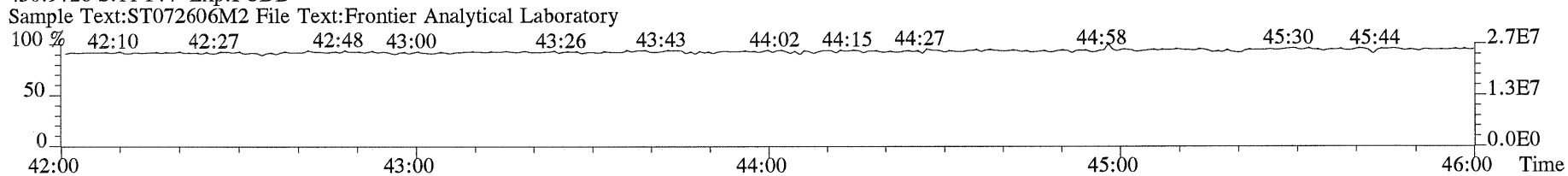
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



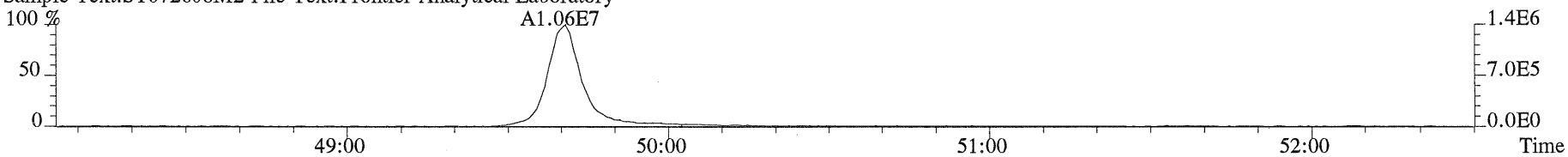
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



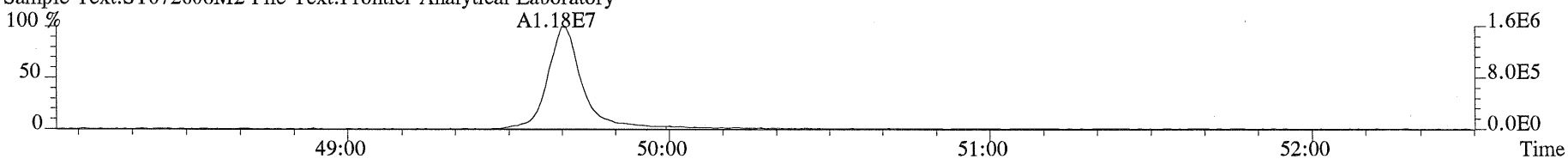
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:11 F:4 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



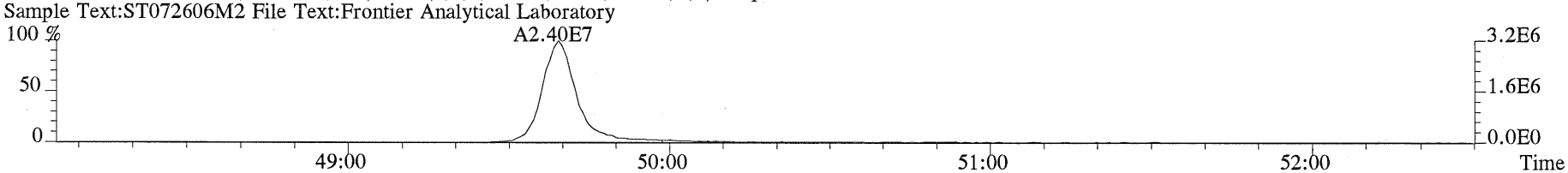
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



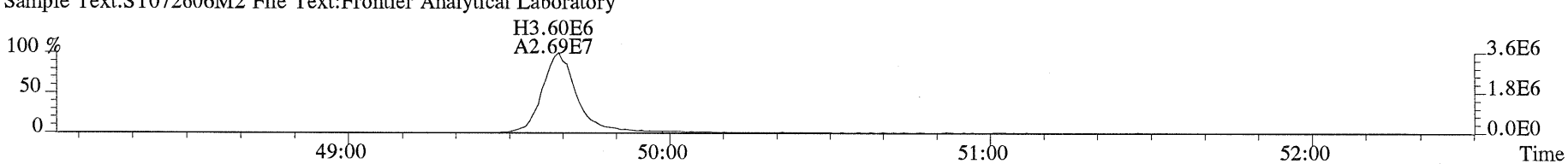
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



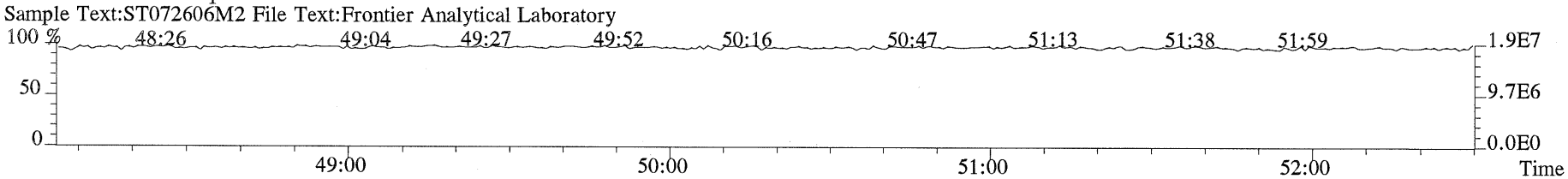
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



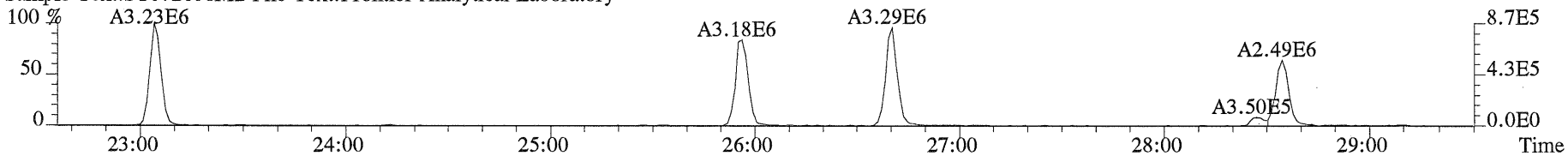
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



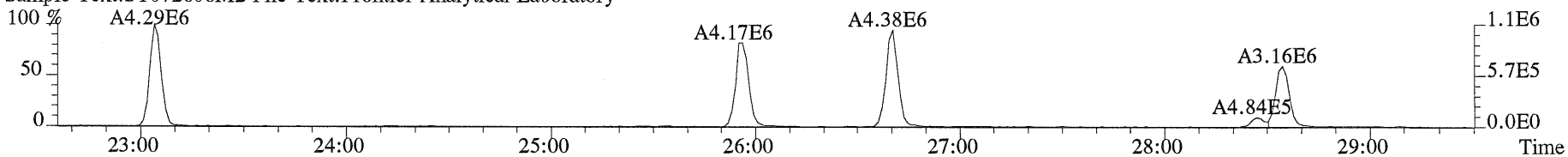
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:11 F:5 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



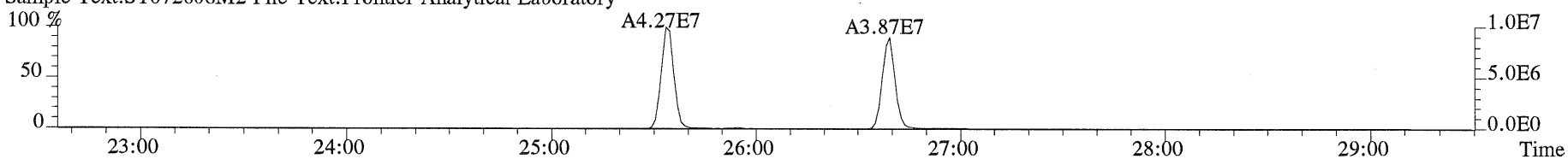
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



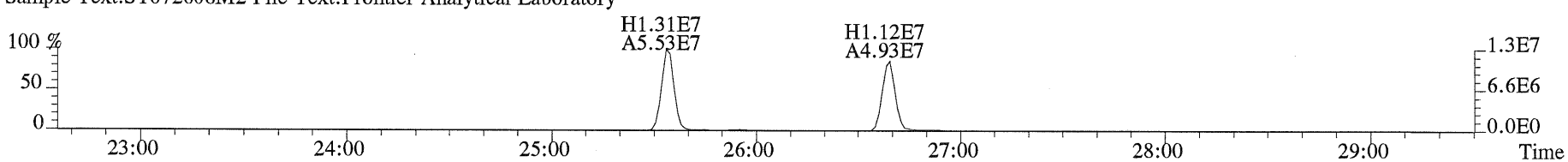
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



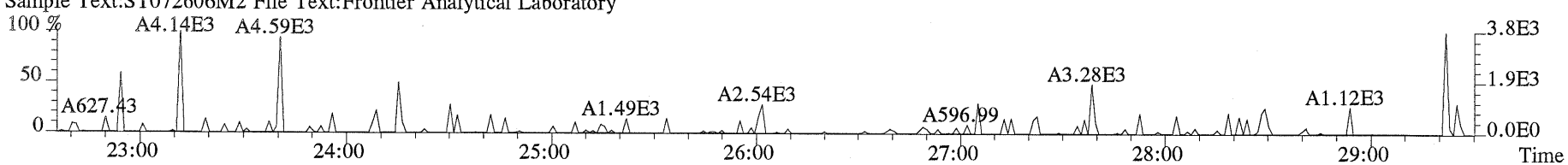
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



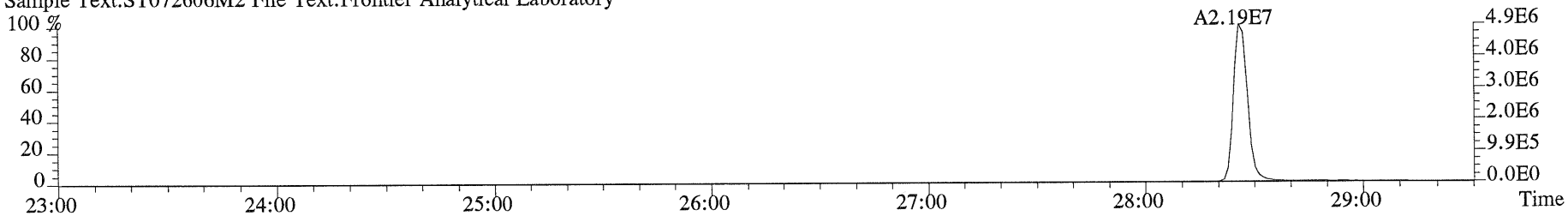
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



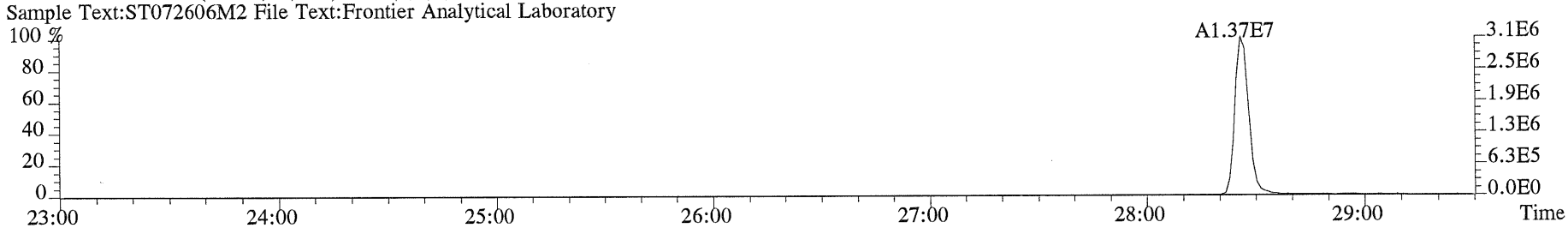
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



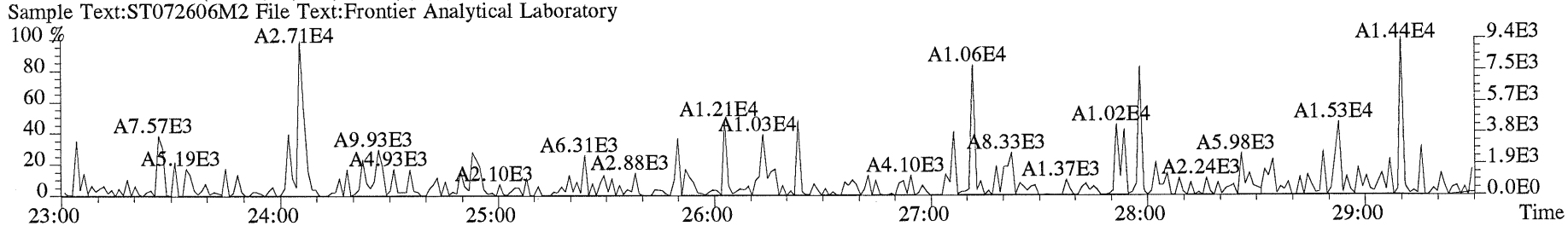
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



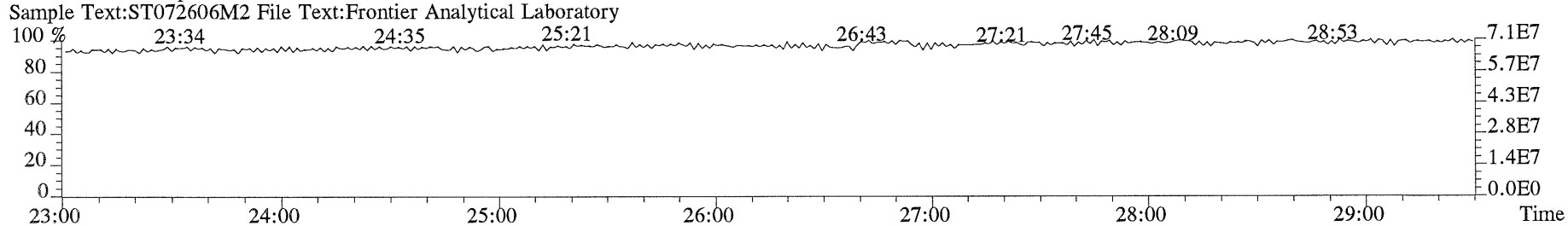
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



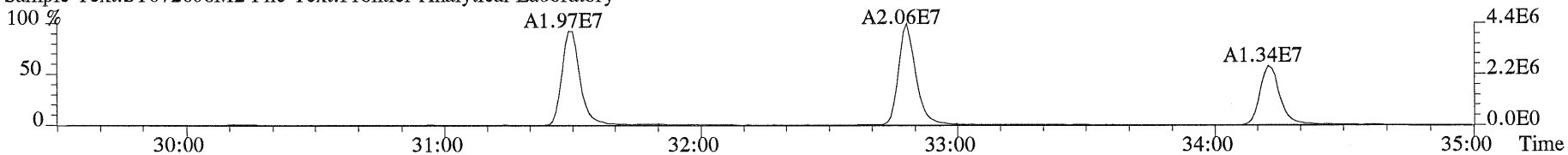
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:11 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



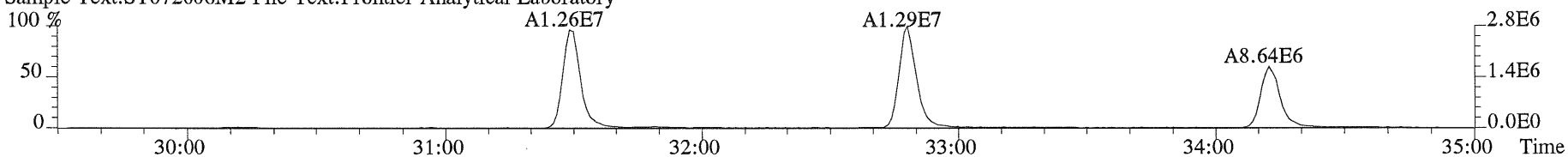
File:26JUL06M #1-390 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:11 Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



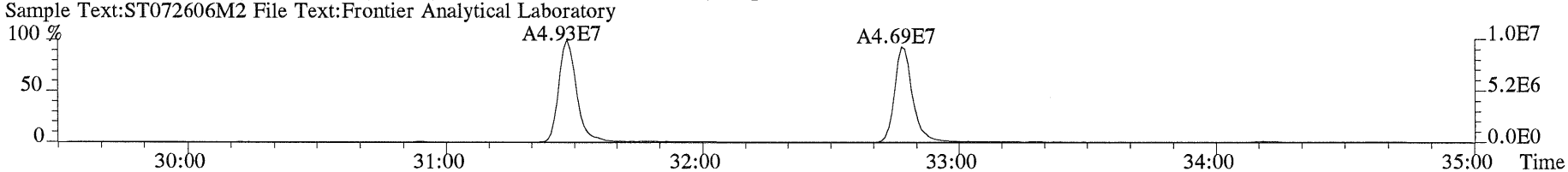
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



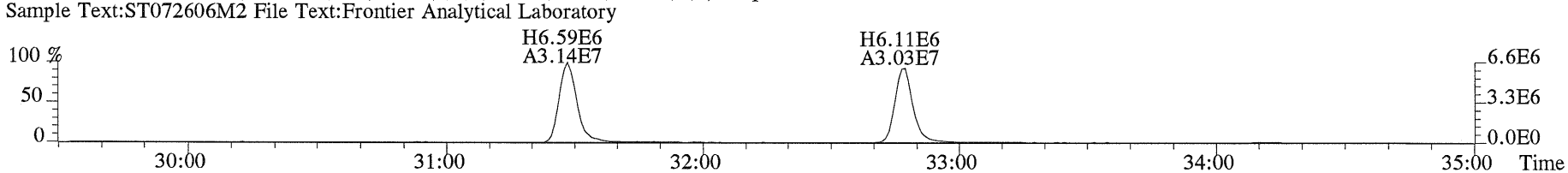
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



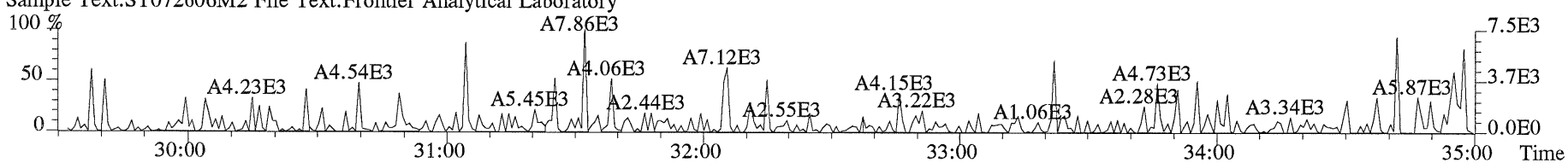
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



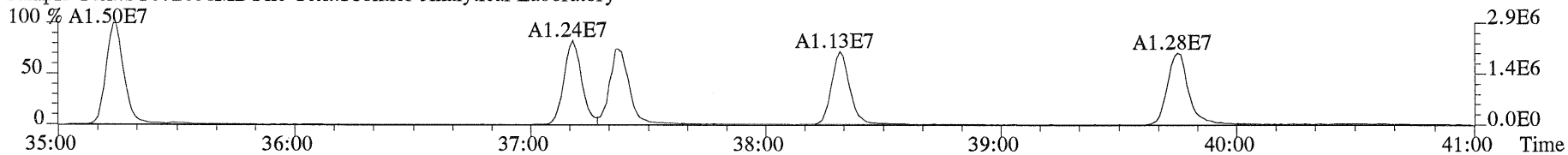
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



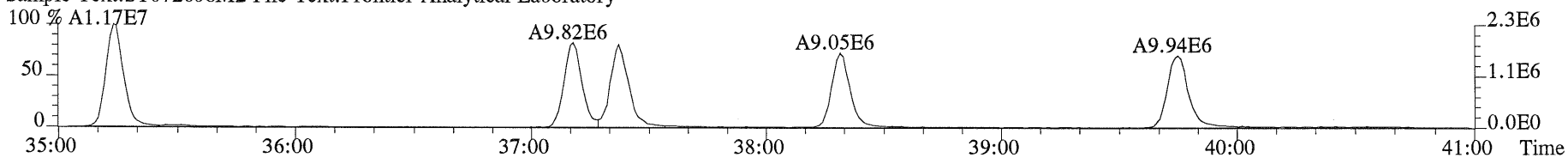
File:26JUL06M #1-425 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:11 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



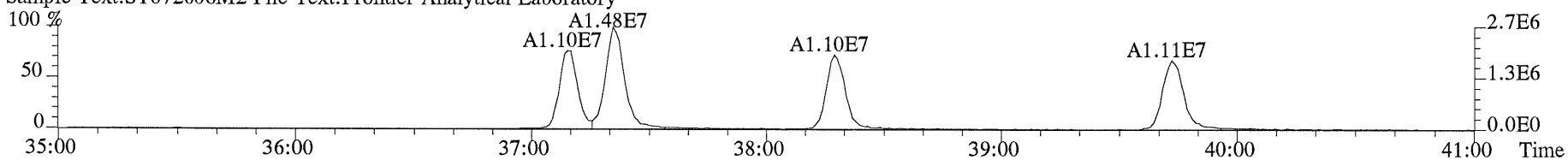
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



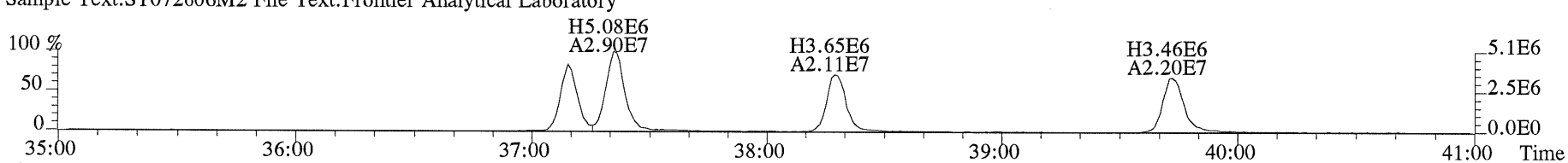
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



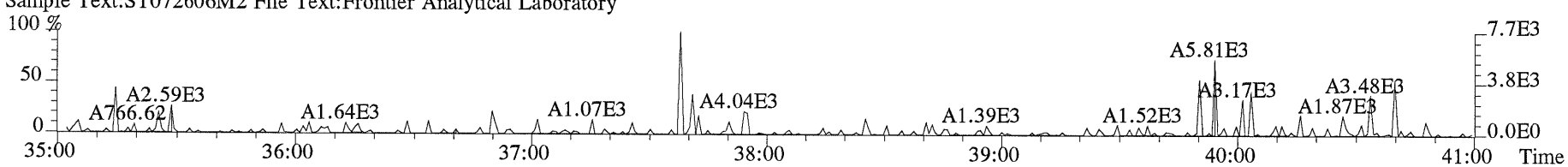
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



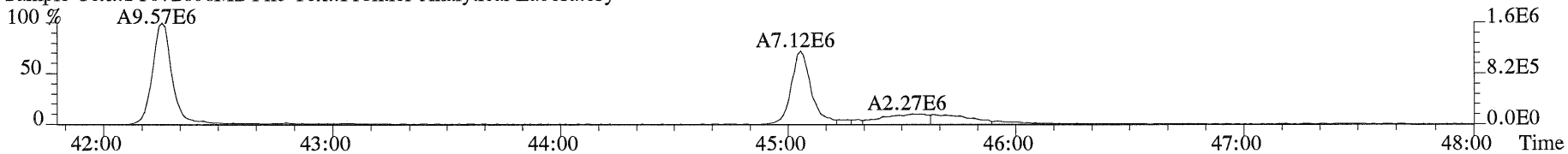
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



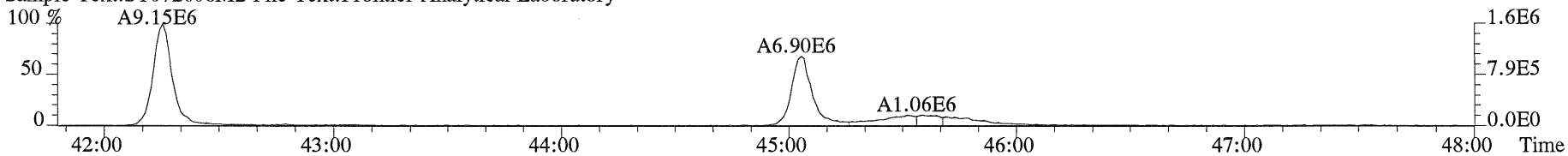
File:26JUL06M #1-463 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:11 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



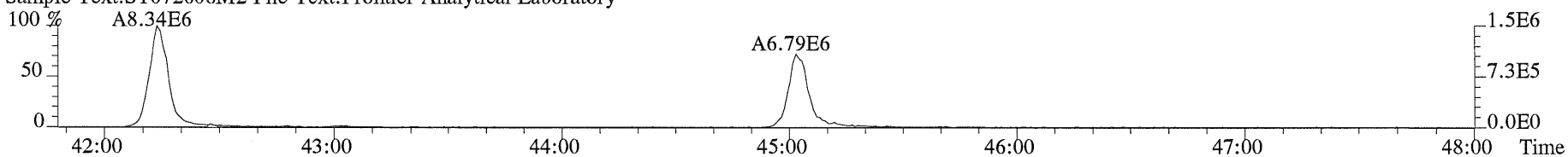
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



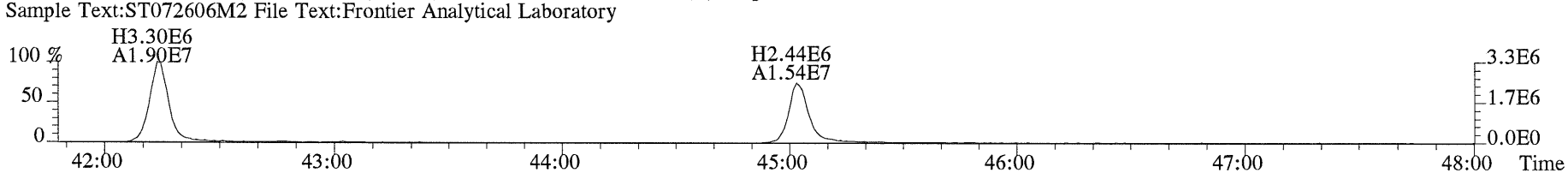
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



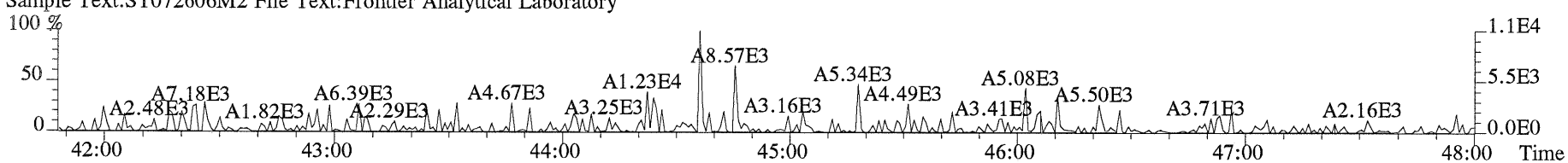
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



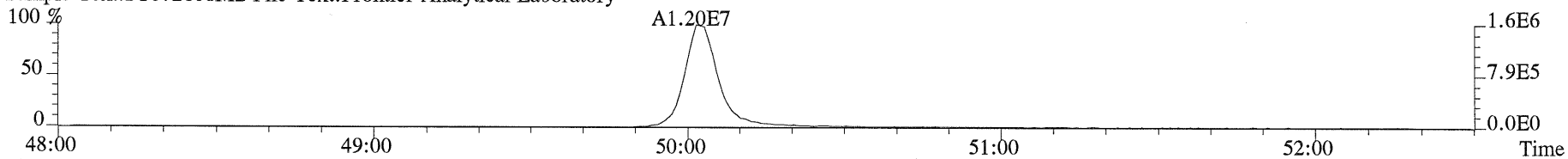
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



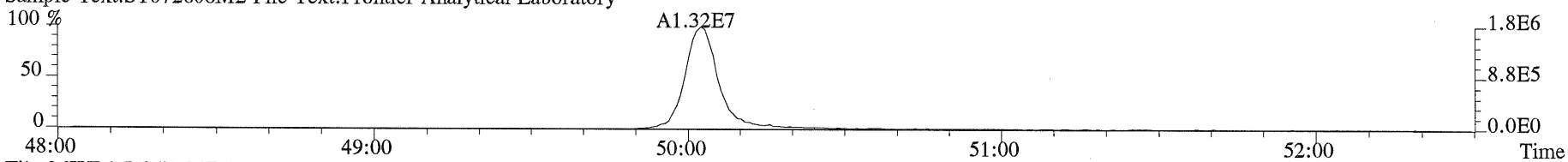
File:26JUL06M #1-542 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:11 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



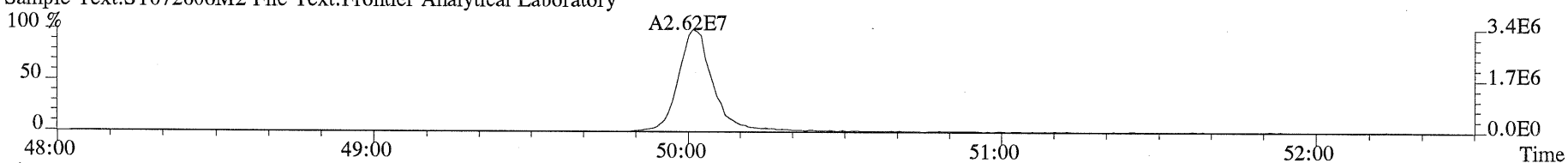
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



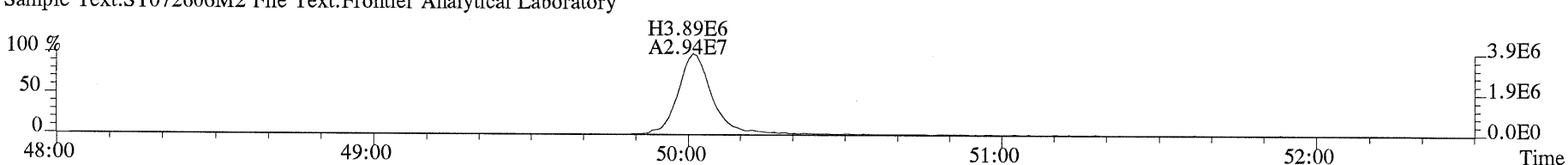
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



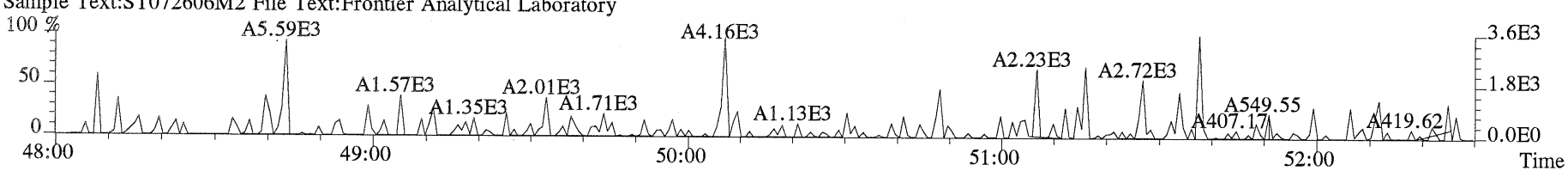
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory



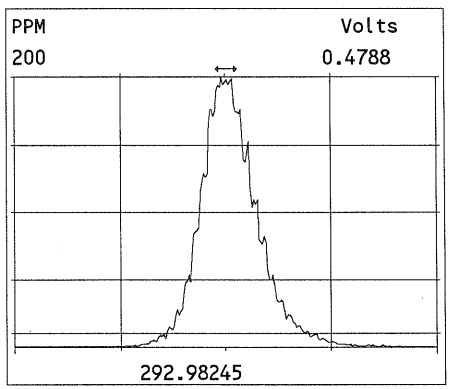
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory

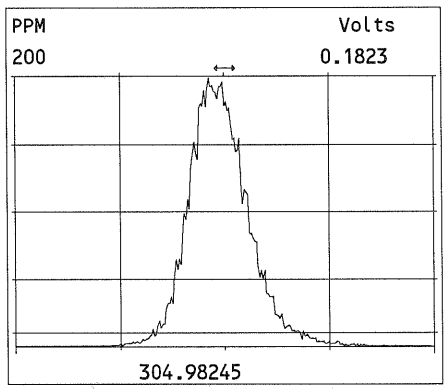


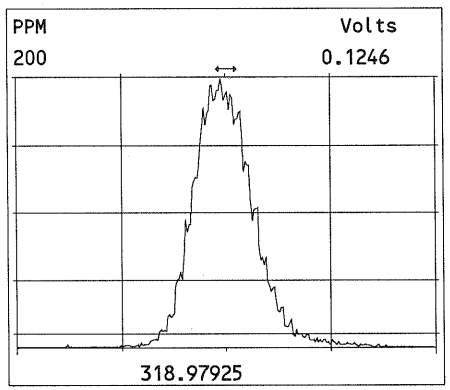
File:26JUL06M #1-347 Acq:27-JUL-2006 02:48:08 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:11 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072606M2 File Text:Frontier Analytical Laboratory

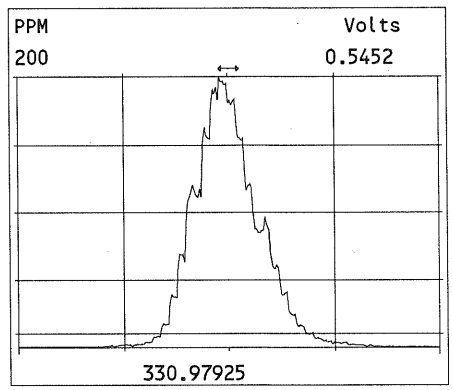


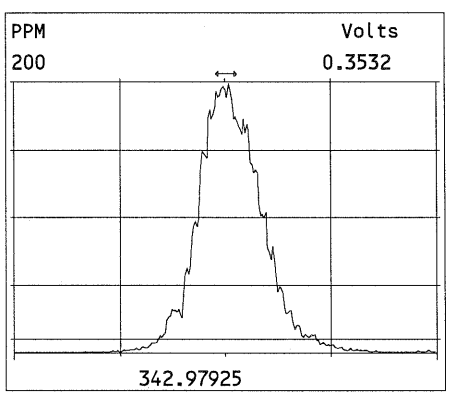
Peak Locate Examination:27-JUL-2006:03:45 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

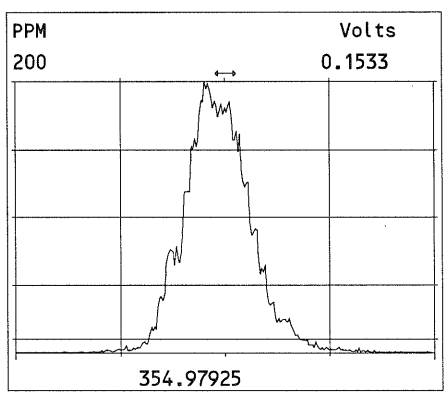


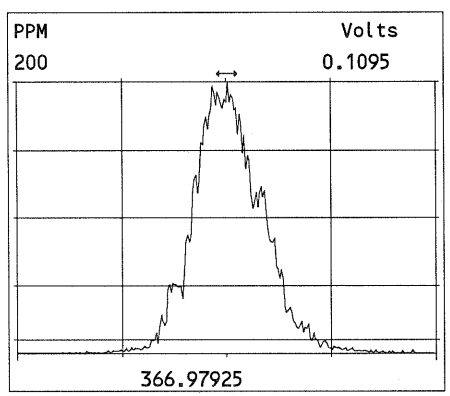


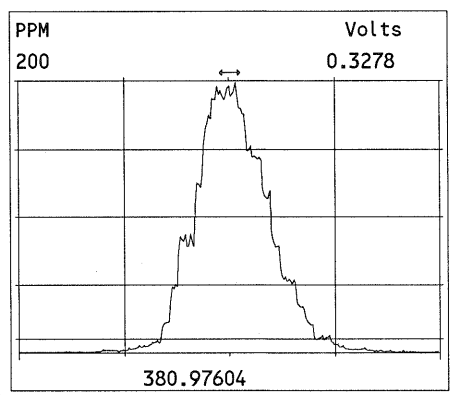


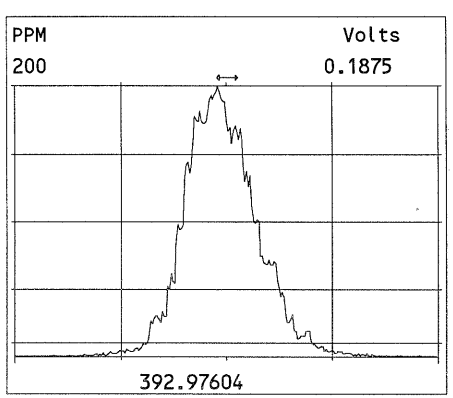


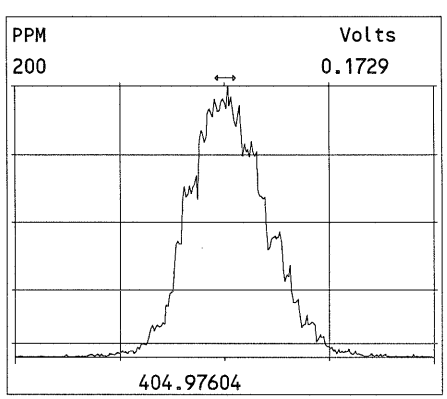


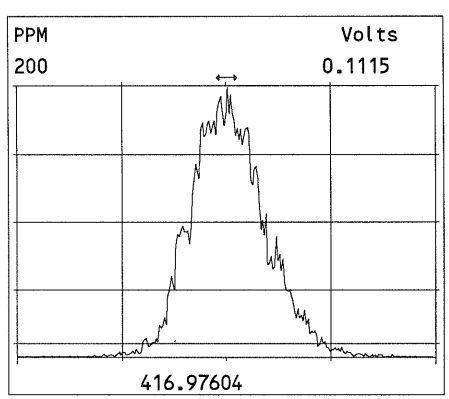




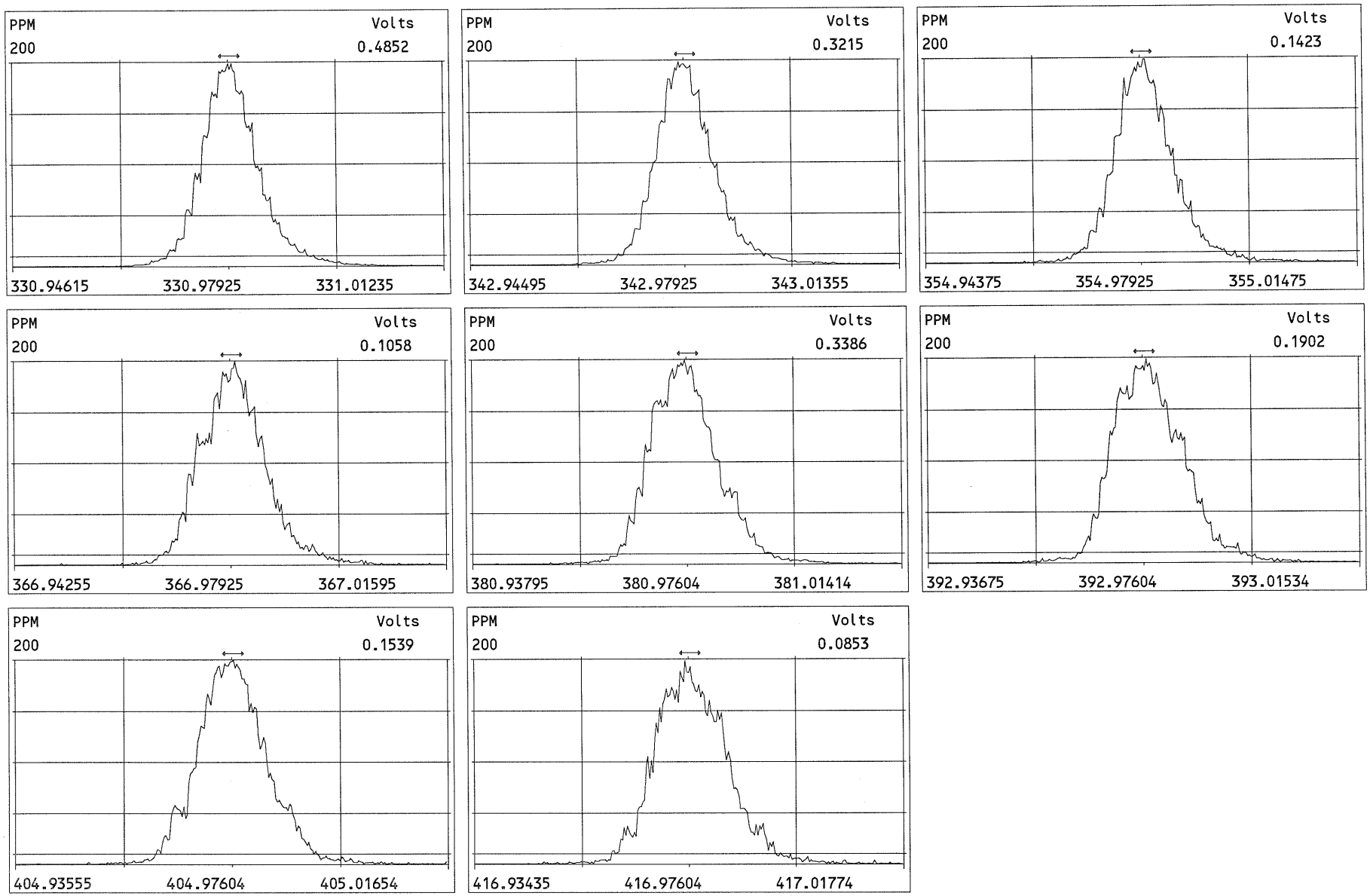




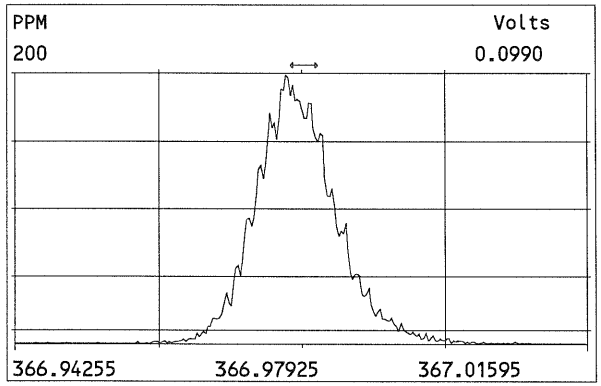


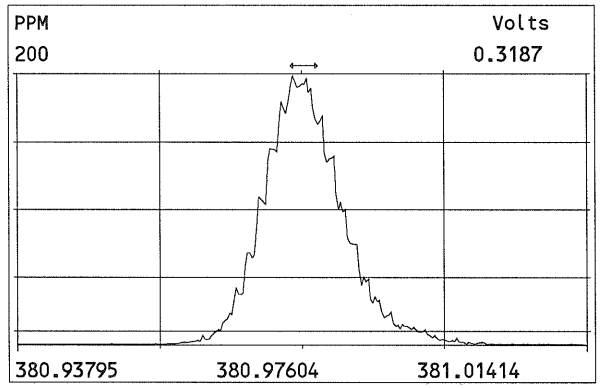


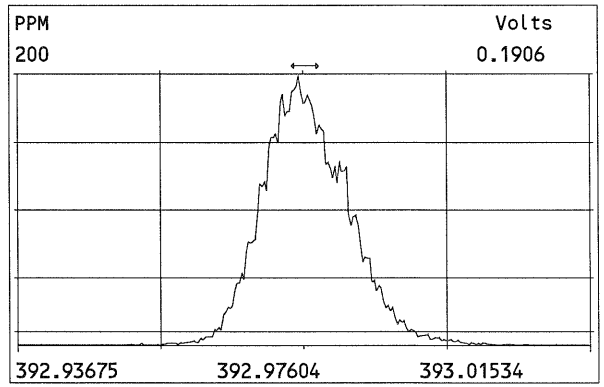
Peak Locate Examination:27-JUL-2006:03:47 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

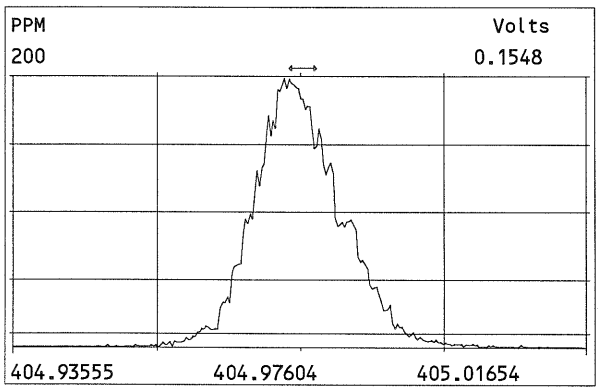


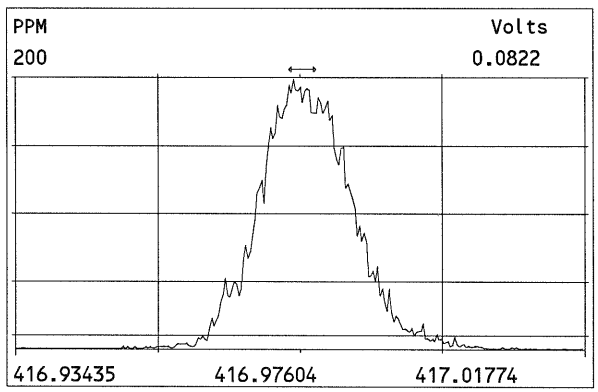
Peak Locate Examination:27-JUL-2006:03:49 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

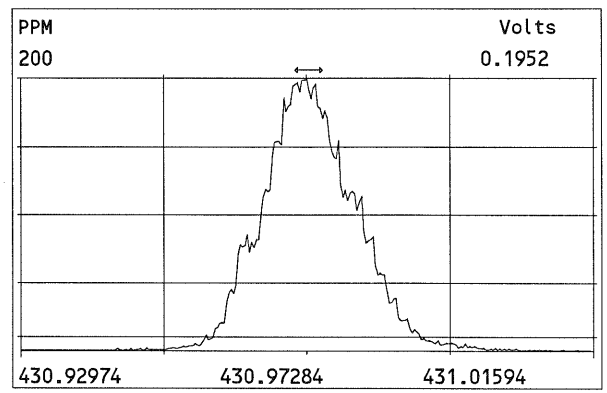


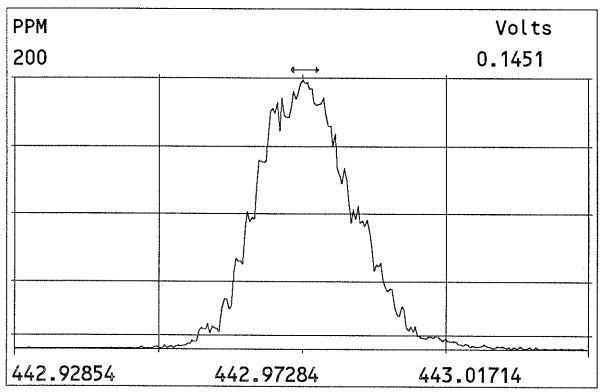


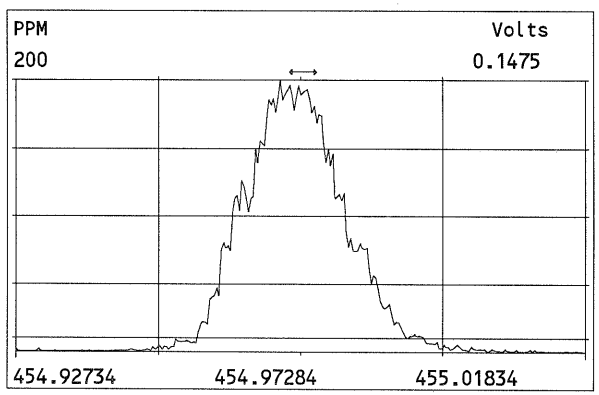






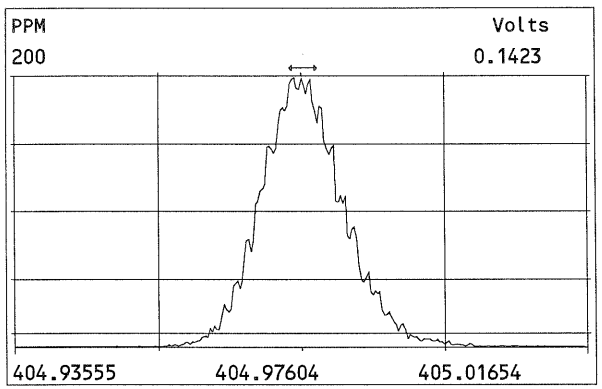


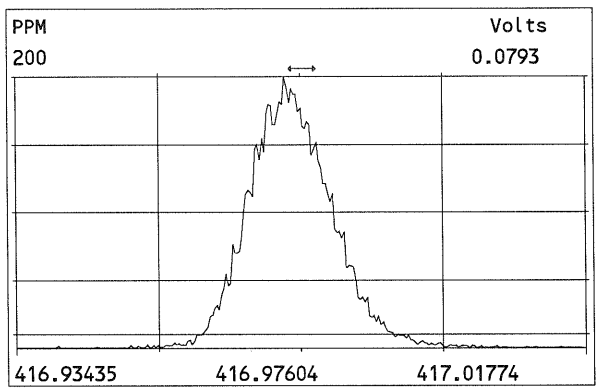


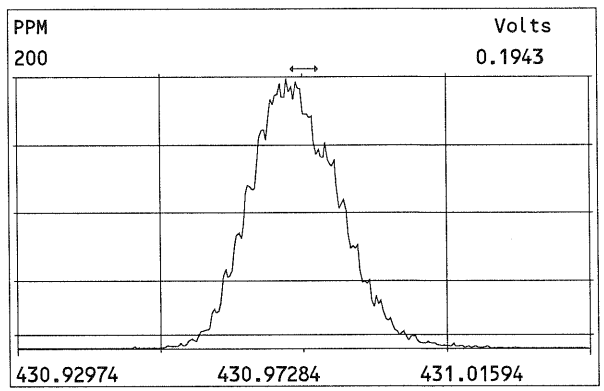


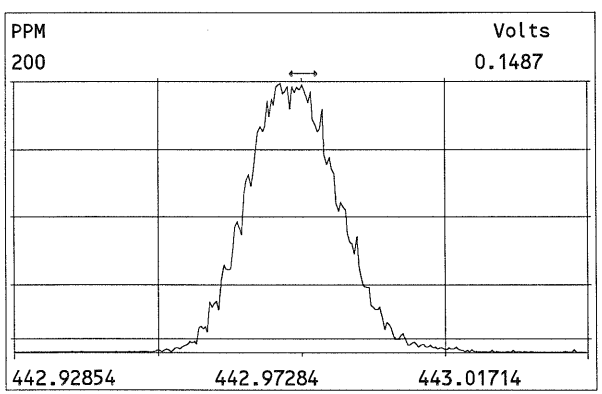
724

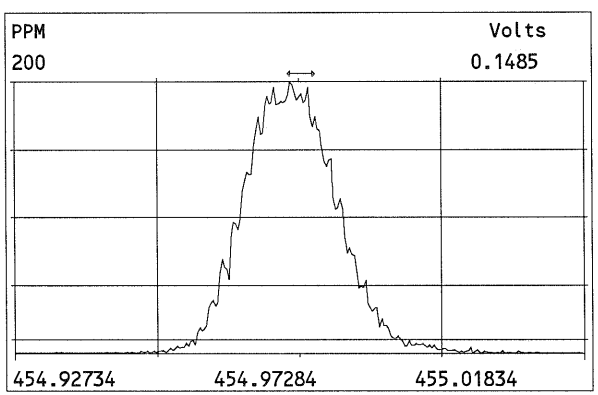
Peak Locate Examination:27-JUL-2006:03:51 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

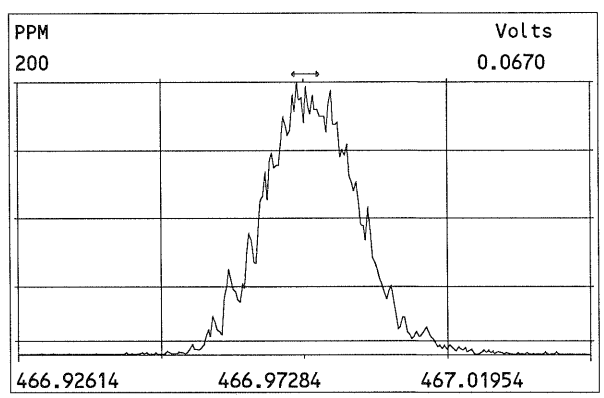


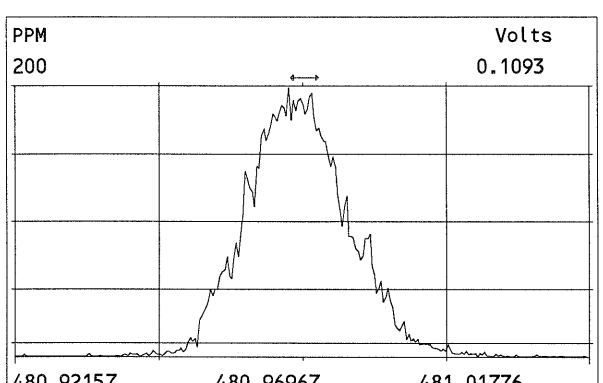






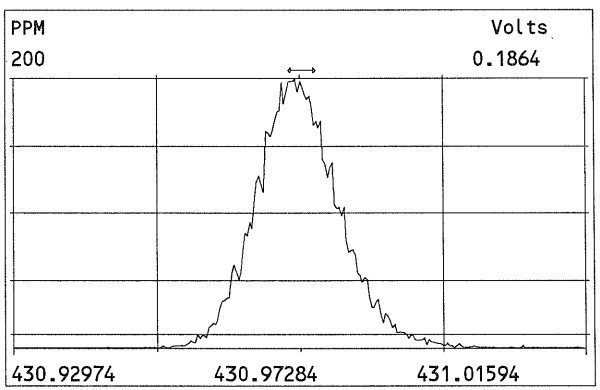


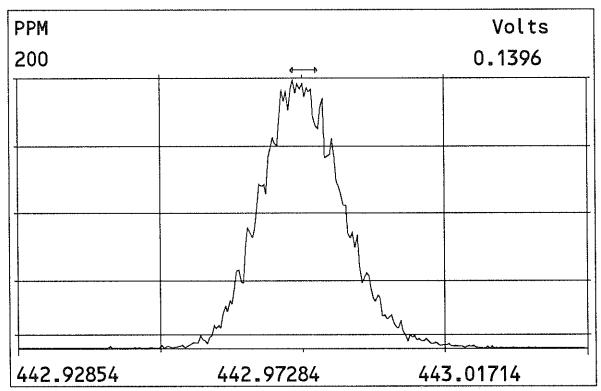


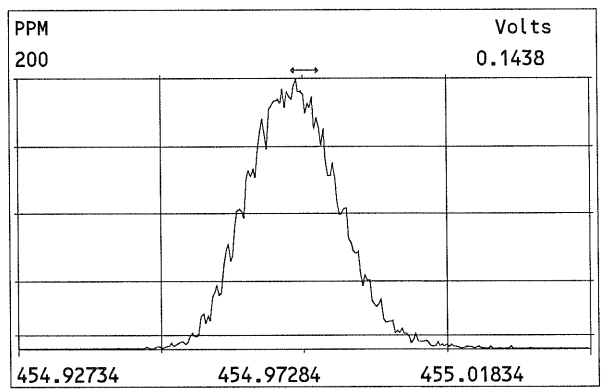


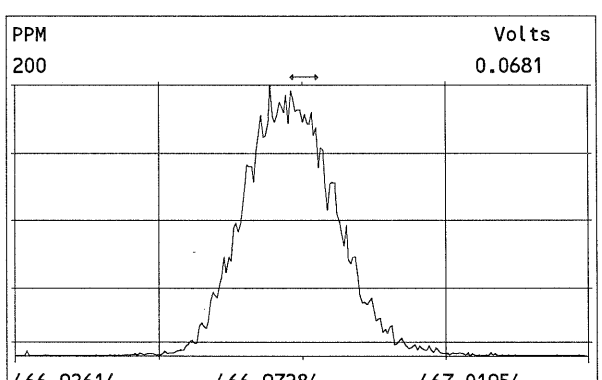
725

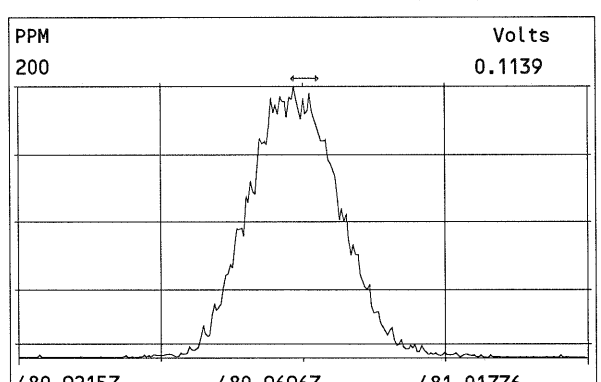
Peak Locate Examination:27-JUL-2006:03:53 File:26JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

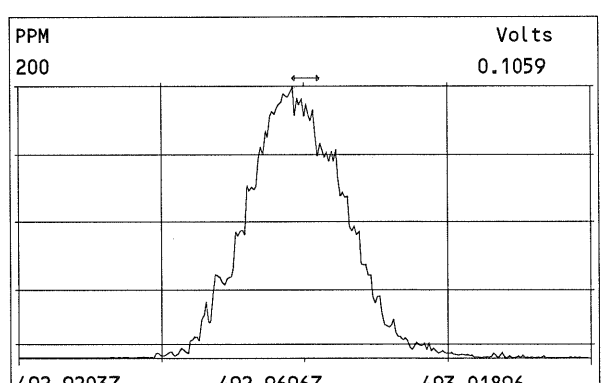


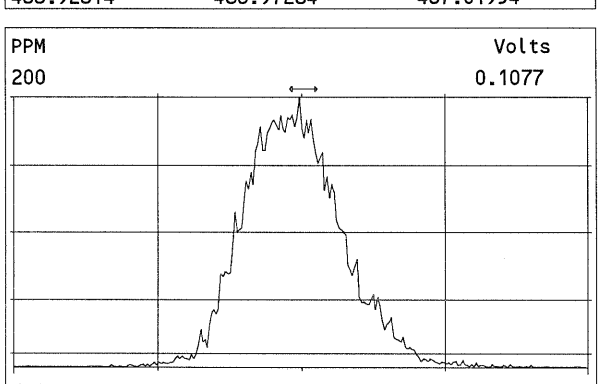


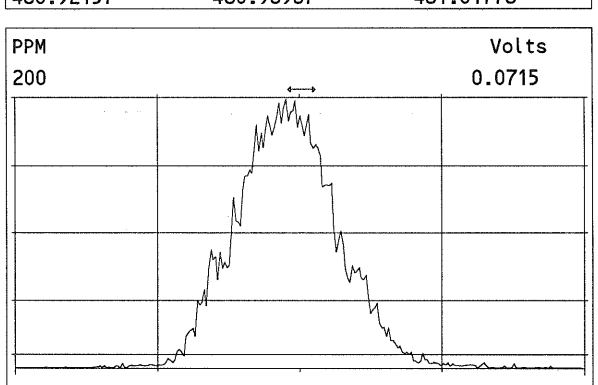












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 10:33:29

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	y	9.20	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	y	48.0	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	48.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	y	50.3	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.17	1.05-1.43	y	52.7	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	y	49.5	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	106	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	y	9.00	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	49.1	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	48.1	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	y	45.8	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	y	47.9	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	y	48.3	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	45.5	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	y	53.9	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88-1.20	y	52.0	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	102	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 10:33:29

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	97.3	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	y	87.6	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	y	90.5	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	y	94.9	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	90.7	72.0 - 138
13C-OCDD	M+2/M+4	0.91	0.76-1.02	y	178	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	98.5	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	92.5	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	y	91.7	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	y	89.1	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	93.5	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43-0.59	y	88.3	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	90.2	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	y	78.8	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.42	0.37-0.51	y	83.8	77.0 - 129
13C-OCDF	M+2/M+4	0.87	0.76-1.02	y	175	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.16	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: [signature] Date: 7/27/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 Time: 10:33:29

DB-5 IS Data Filename: 27JUL06M Sam:1 Analysis Date: 27-JUL-06 Time: 10:33:29

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:17	1,3,6,8-TCDF (F)	22:56
1,2,8,9-TCDD (L)	28:14	1,2,8,9-TCDF (L)	28:27
1,2,4,7,9-PeCDD (F)	30:08	1,3,4,6,8-PeCDF (F)	28:18
1,2,3,8,9-PeCDD (L)	33:41	1,2,3,8,9-PeCDF (L)	34:06
1,2,4,6,7,9-HxCDD (F)	36:00	1,2,3,4,6,8-HxCDF (F)	35:08
1,2,3,7,8,9-HxCDD (L)	39:04	1,2,3,7,8,9-HxCDF (L)	39:38
1,2,3,4,6,7,9-HpCDD (F)	42:40	1,2,3,4,6,7,8-HpCDF (F)	42:09
1,2,3,4,6,7,8-HpCDD (L)	44:03	1,2,3,4,7,8,9-HpCDF (L)	44:57

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT
BETWEEN
COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 10:33:29 CS3 or VER Data Filename: 27JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.000	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.001	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.023	0.989-1.052
13C-2,3,7,8-TCDD		1.022	0.976-1.043
13C-2,3,7,8-TCDF		0.994	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.175	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.224	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: _____ Date: 7/28/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 10:33:29 CS3 or VER Data Filename: 27JUL06M Sam:1

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.000	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.001	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.000	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.278	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/6/06

FAL ID: ST072706M1 Filename: 27JUL06M Sam:1 Acquired: 27-JUL-06 10:33:29 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072706M1 EndCal: ST072706M2
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 96.2
WHO 1998 Tox: 120

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	9.77e+06	0.77 y	27:18	1.10	9.20		2.50	-	*	
1,2,3,7,8-PeCDD	3.61e+07	1.58 y	33:05	0.90	48.0		2.50	-	*	
1,2,3,4,7,8-HxCDD	2.55e+07	1.28 y	38:27	0.96	48.3		2.50	-	*	
1,2,3,6,7,8-HxCDD	2.89e+07	1.24 y	38:37	0.83	50.3		2.50	-	*	
1,2,3,7,8,9-HxCDD	2.54e+07	1.17 y	39:04	0.77	52.7		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	2.49e+07	1.03 y	44:03	0.86	49.5		2.50	-	*	
OCDD	3.92e+07	0.87 y	49:34	0.87	106		2.50	-	*	
2,3,7,8-TCDF	1.10e+07	0.76 y	26:33	0.99	9.00		2.50	-	*	
1,2,3,7,8-PeCDF	4.82e+07	1.55 y	31:22	0.80	49.1		2.50	-	*	
2,3,4,7,8-PeCDF	4.84e+07	1.56 y	32:41	0.88	48.1		2.50	-	*	
1,2,3,4,7,8-HxCDF	3.36e+07	1.26 y	37:05	1.42	45.8		2.50	-	*	
1,2,3,6,7,8-HxCDF	3.58e+07	1.23 y	37:15	0.97	47.9		2.50	-	*	
2,3,4,6,7,8-HxCDF	3.19e+07	1.20 y	38:13	1.26	48.3		2.50	-	*	
1,2,3,7,8,9-HxCDF	3.62e+07	1.27 y	39:38	1.34	45.5		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	3.16e+07	1.01 y	42:09	1.28	53.9		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	2.49e+07	1.08 y	44:57	1.22	52.0		2.50	-	*	
OCDF	4.41e+07	0.90 y	49:56	0.90	102		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	9.66e+07	0.78 y	27:16	1.00	97.3					97.3
13C-1,2,3,7,8-PeCDD	8.33e+07	1.59 y	33:04	0.96	87.6					87.6
13C-1,2,3,4,7,8-HxCDD	5.51e+07	1.28 y	38:26	0.90	90.5					90.5
13C-1,2,3,6,7,8-HxCDD	6.94e+07	1.31 y	38:35	1.09	94.9					94.9
13C-1,2,3,4,6,7,8-HpCDD	5.85e+07	1.06 y	44:02	0.96	90.7					90.7
13C-OCDD	8.53e+07	0.91 y	49:32	0.71	178					88.8
13C-2,3,7,8-TCDF	1.23e+08	0.78 y	26:32	0.94	98.5					98.5
13C-1,2,3,7,8-PeCDF	1.23e+08	1.58 y	31:21	1.00	92.5					92.5
13C-2,3,4,7,8-PeCDF	1.15e+08	1.59 y	32:40	0.94	91.7					91.7
13C-1,2,3,4,7,8-HxCDF	5.15e+07	0.53 y	37:03	0.86	89.1					89.1
13C-1,2,3,6,7,8-HxCDF	7.72e+07	0.51 y	37:15	1.23	93.5					93.5
13C-2,3,4,6,7,8-HxCDF	5.25e+07	0.54 y	38:11	0.88	88.3					88.3
13C-1,2,3,7,8,9-HxCDF	5.96e+07	0.52 y	39:37	0.98	90.2					90.2
13C-1,2,3,4,6,7,8-HpCDF	4.58e+07	0.43 y	42:08	0.86	78.8					78.8
13C-1,2,3,4,7,8,9-HpCDF	3.95e+07	0.42 y	44:56	0.70	83.8					83.8
13C-OCDF	9.66e+07	0.87 y	49:54	0.82	175					87.5
37Cl-2,3,7,8-TCDD	6.56e+06		27:18	0.81	8.16					81.6
13C-1,2,3,4-TCDD	9.94e+07	0.79 y	26:41	-	51.9					
13C-1,2,3,4-TCDF	1.33e+08	0.77 y	25:26	-	46.2					
13C-1,2,3,7,8,9-HxCDD	6.73e+07	1.22 y	39:02	-	45.1					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	4.05e+07		23:09	1.10	38.1		2.50	-	*	28
Total Penta-Dioxins	9.95e+07		30:08	0.90	132		2.50	-	*	25
Total Hexa-Dioxins	1.15e+08		36:00	0.85	218		2.50	-	*	35
Total Hepta-Dioxins	4.91e+07		41:22	0.86	97.6		2.50	-	*	37
Total Tetra-Furans	4.38e+07		22:56	0.99	35.9		2.50	-	*	27
1st Fn. Tot Penta-Furans	5.48e+07		28:18	0.84	55.1		2.50	-	*	4 PeCDF
Total Penta-Furans	1.33e+08		30:03	0.84	134		2.50	-	*	20 189
Total Hexa-Furans	1.68e+08		35:08	1.22	229		2.50	-	*	32
Total Hepta-Furans	6.05e+07		42:09	1.25	113		2.50	-	*	40

Analyst: _____ Date: 7/28/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:27JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

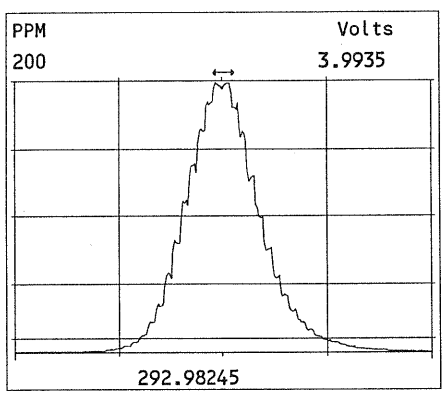
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
27JUL06M	1	ST072706M1	1613 CS3 (051212J)	27-JUL-06 10:33:29	ST072706M1	ST072706M2	TC
27JUL06M	2	3956-001-0001-SA	IG7-S1	27-JUL-06 11:28:52	ST072706M1	ST072706M2	TC
27JUL06M	3	3963-001-0001-SA	061409-08	27-JUL-06 12:24:11	ST072706M1	ST072706M2	TC
27JUL06M	4	3963-002-0001-SA	061409-09	27-JUL-06 13:19:31	ST072706M1	ST072706M2	TC
27JUL06M	5	3963-003-0001-SA	061409-10	27-JUL-06 14:14:54	ST072706M1	ST072706M2	TC
27JUL06M	6	3967-001-0001-SA	C-4, S-1	27-JUL-06 15:10:18	ST072706M1	ST072706M2	TC
27JUL06M	7	SB072706M1	Solvent Blank	27-JUL-06 16:05:42	ST072706M1	ST072706M2	TC
27JUL06M	8	ST072706M2	1613 CS3 (051212J)	27-JUL-06 17:01:01	ST072706M2	ST072706M3	TC

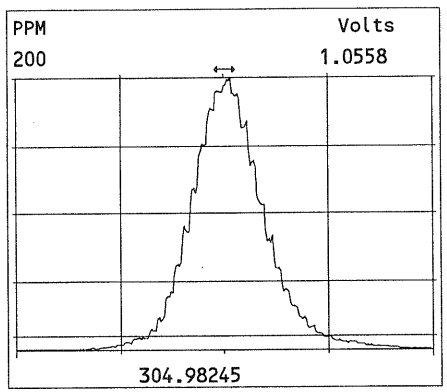
7/28/06

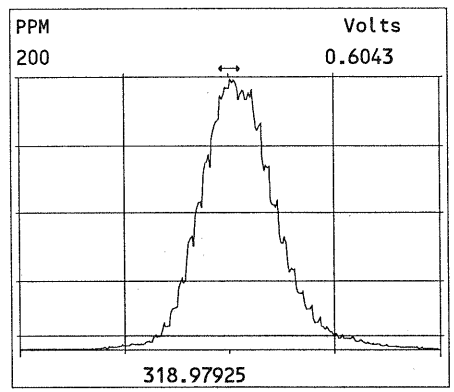
Data Backed Up:_____

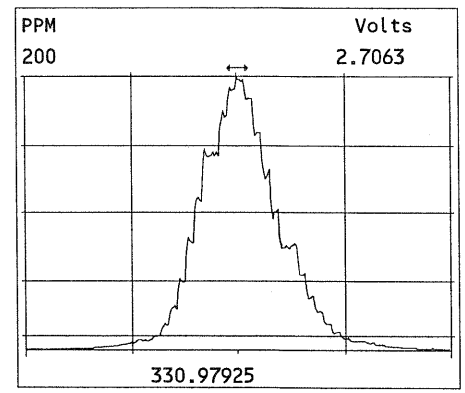
Date:_____

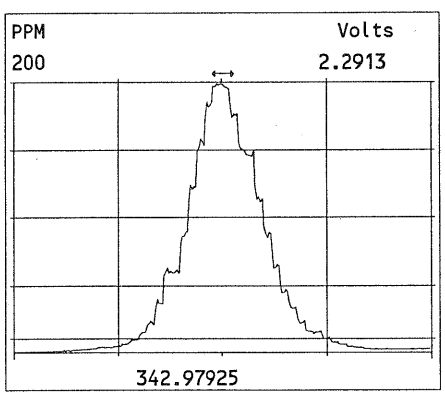
Peak Locate Examination:27-JUL-2006:10:31 File:27JUL06M
Experiment:PCDD Function:1 Reference:PFK

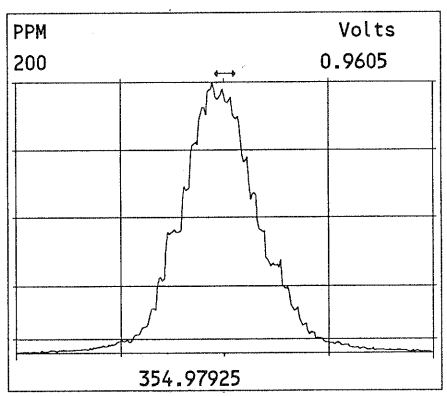


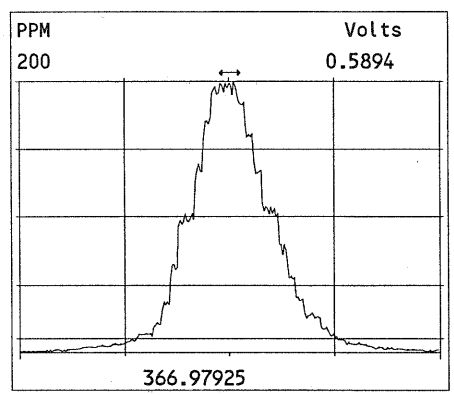


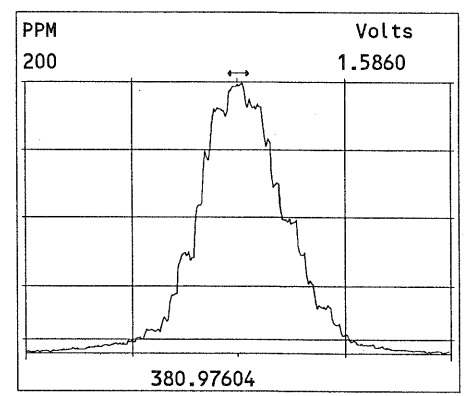


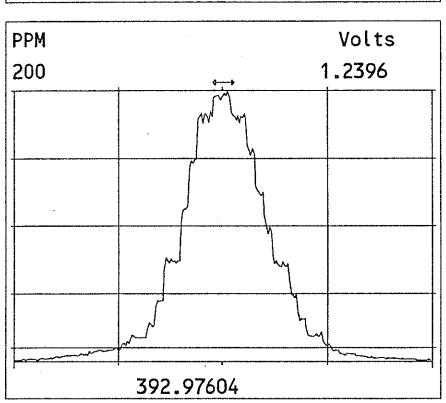


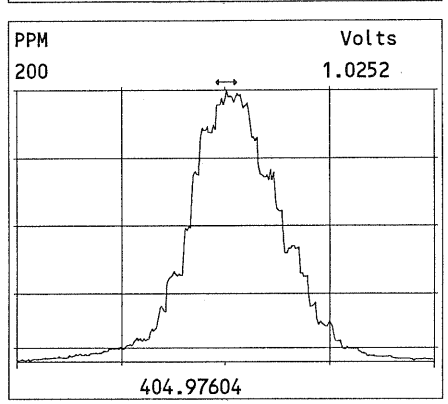


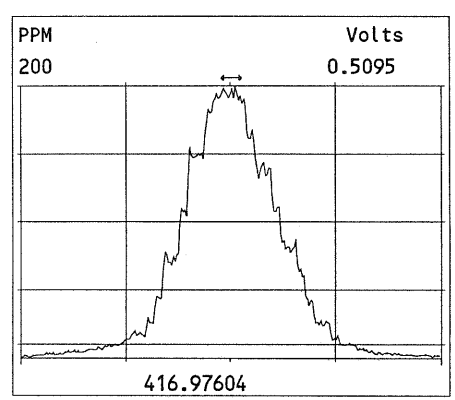




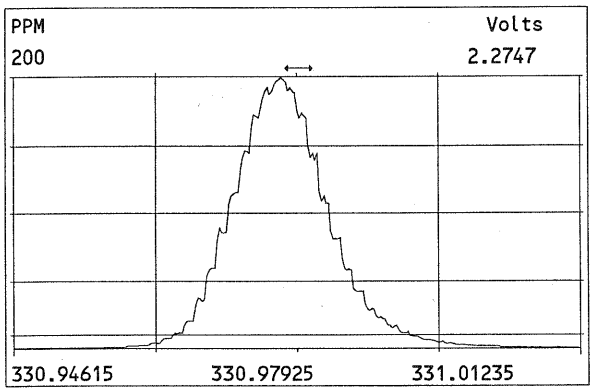


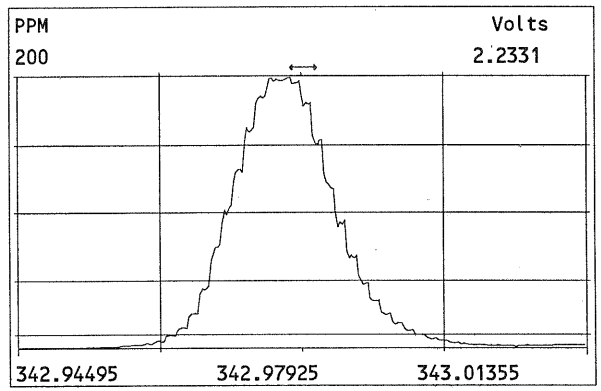


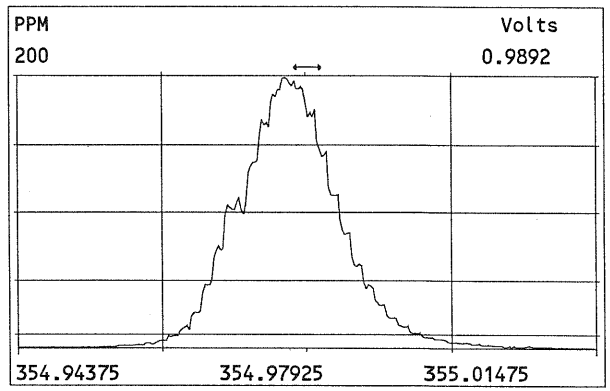


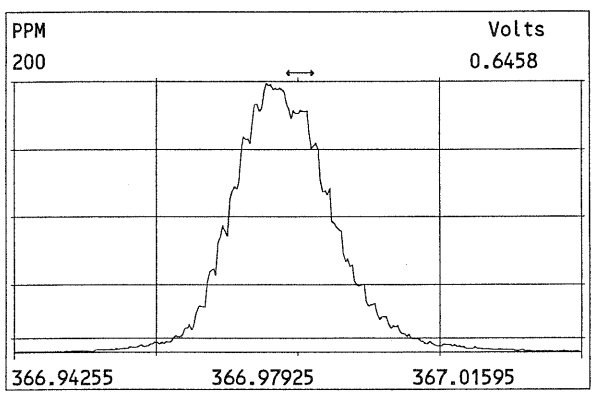


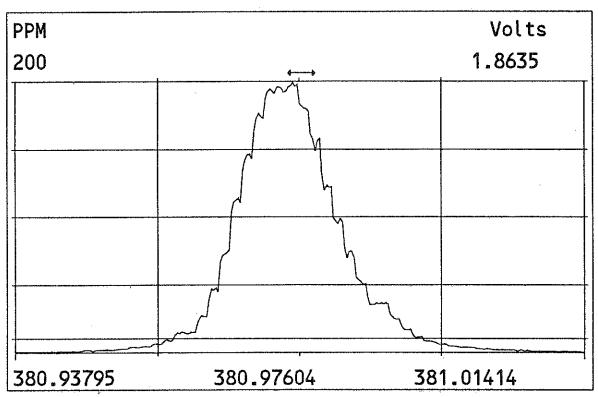
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:2 Reference:PFK

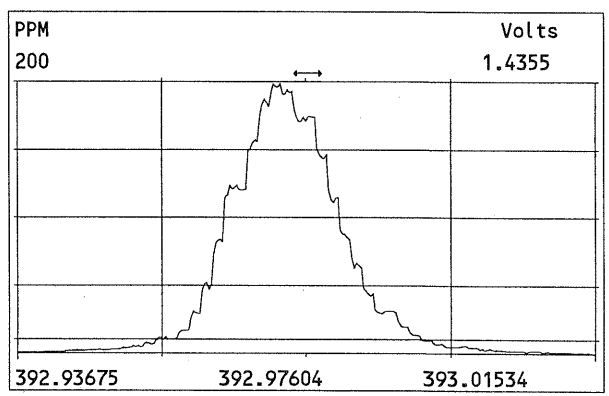


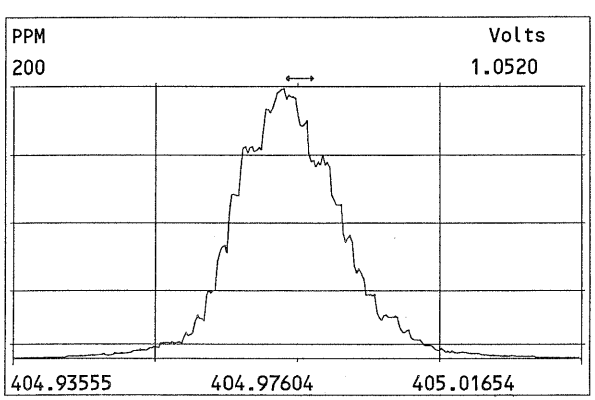


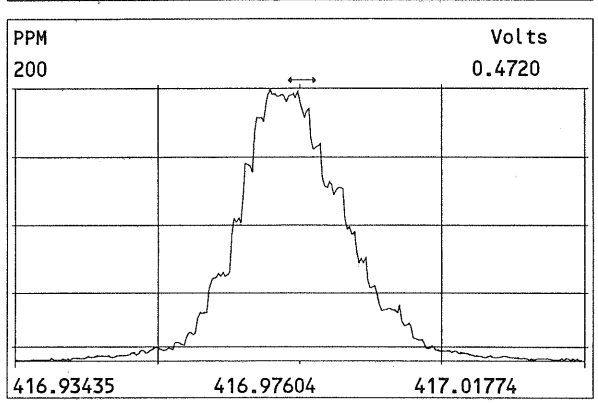




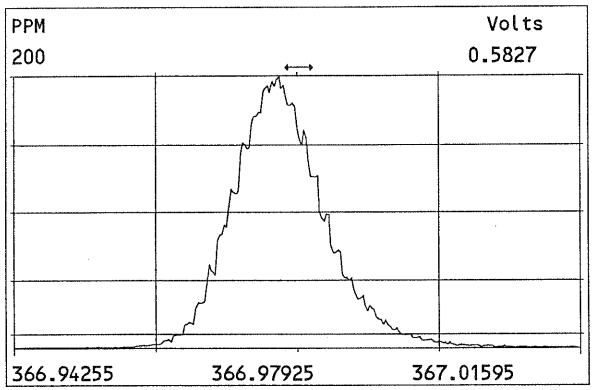


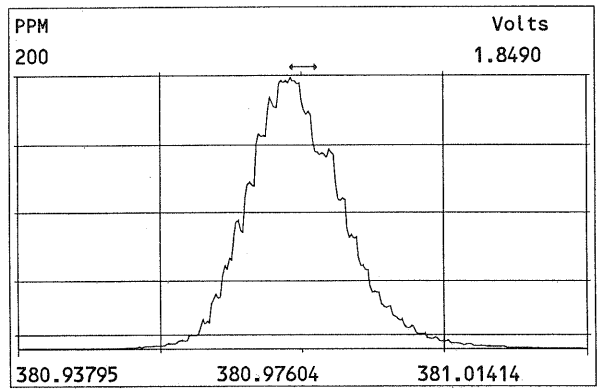


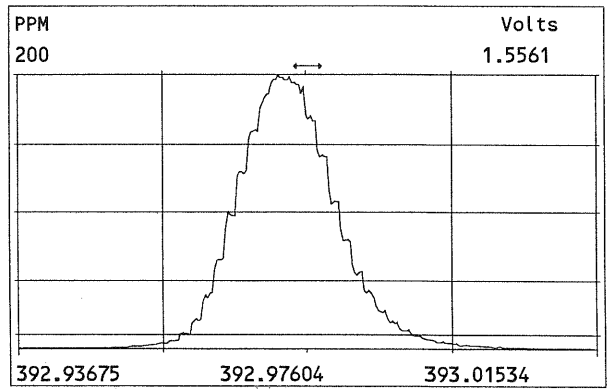


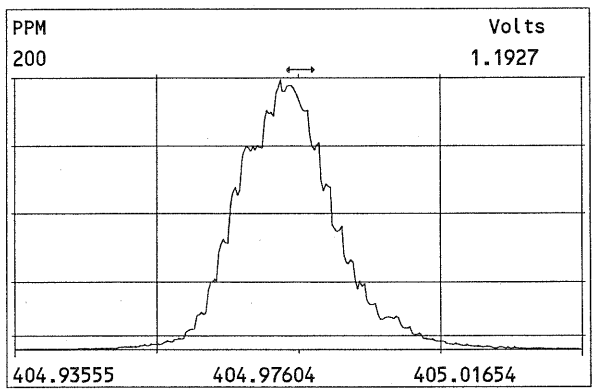


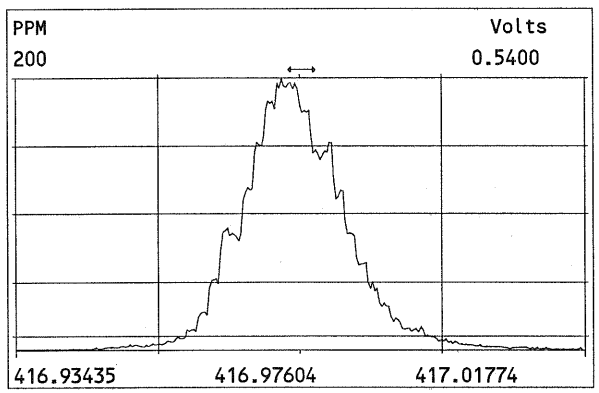
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:3 Reference:PFK

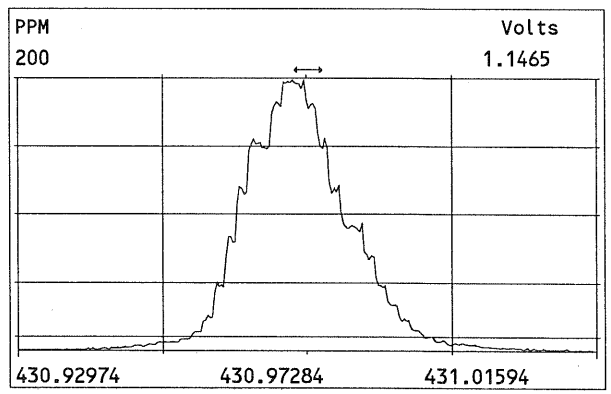


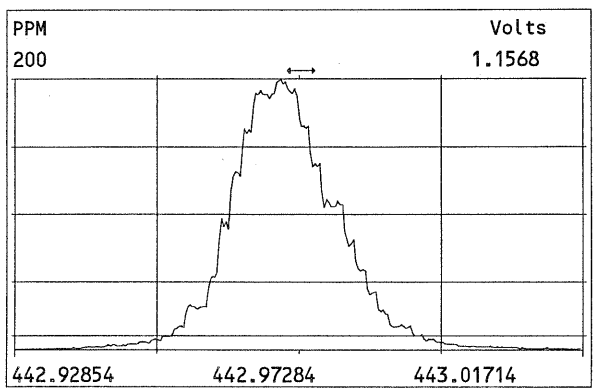


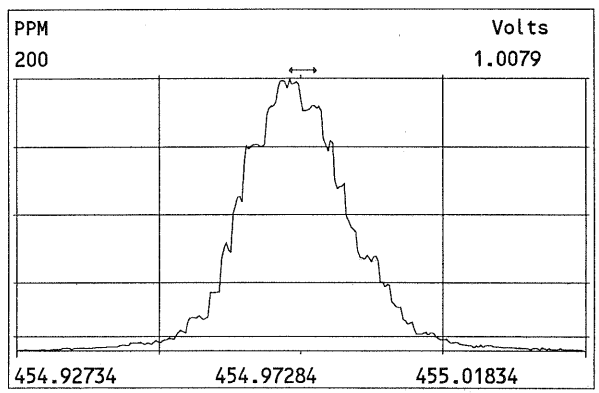












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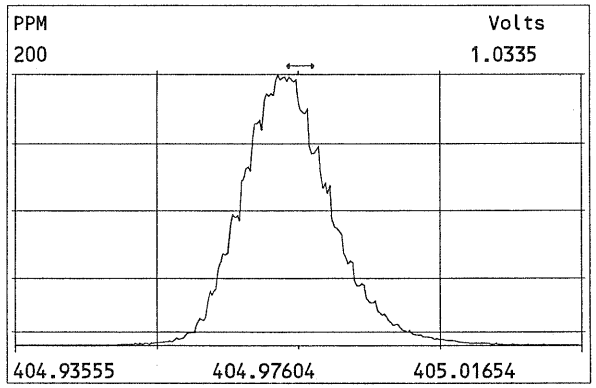
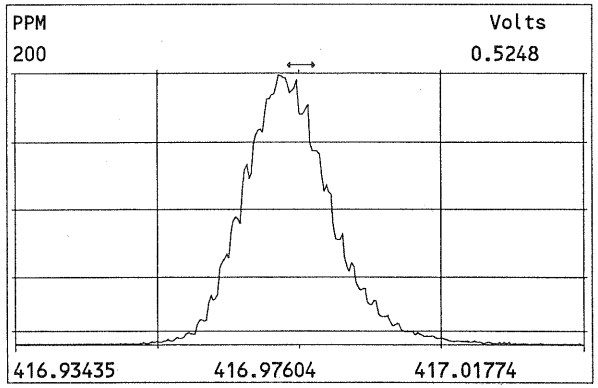
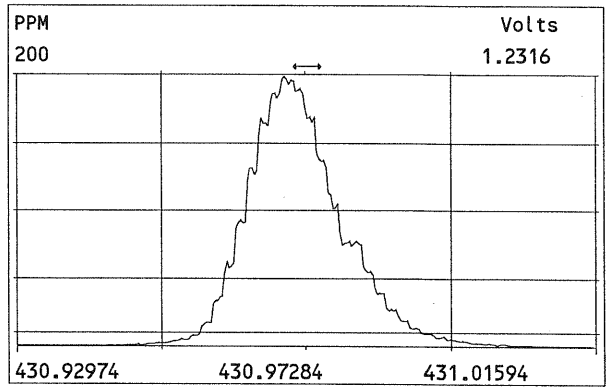
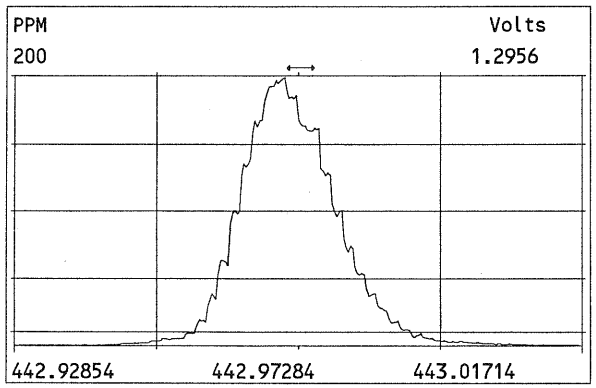
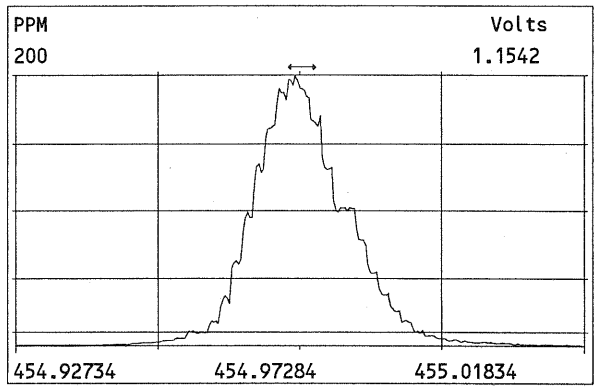
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:4 Reference:PFK

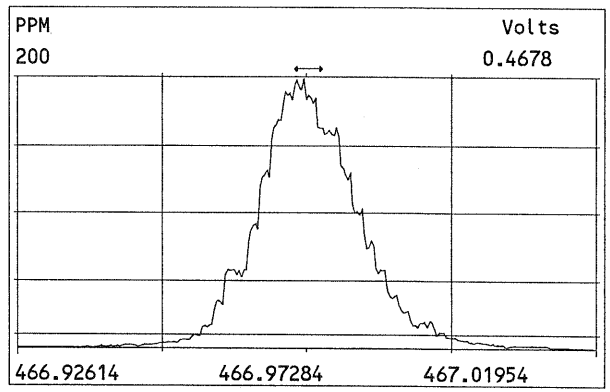


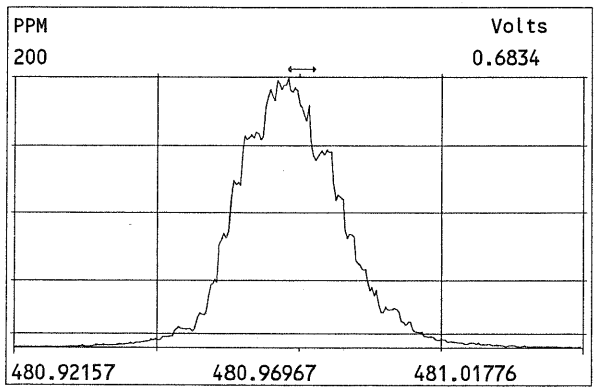




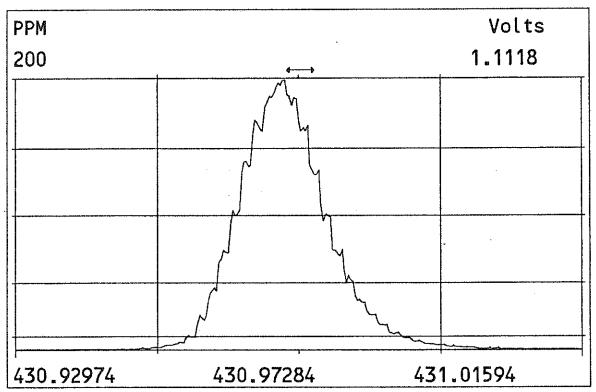


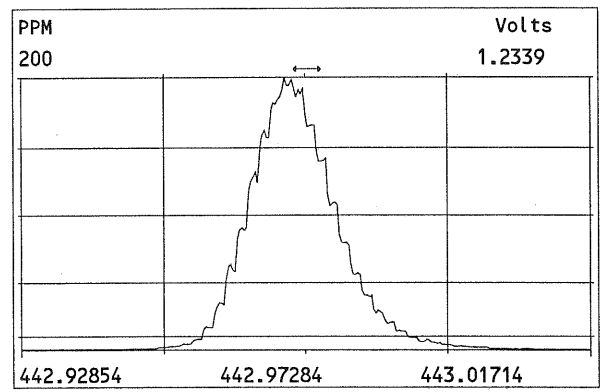


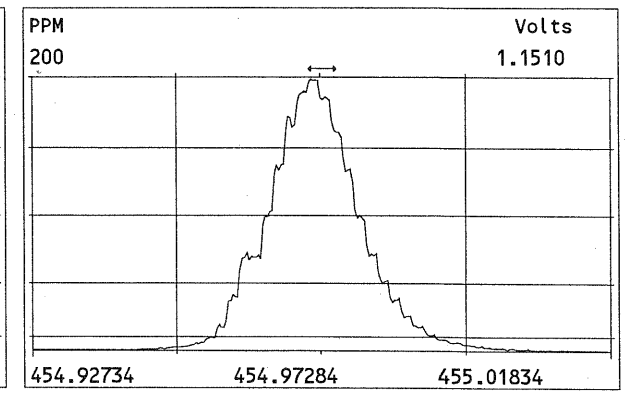


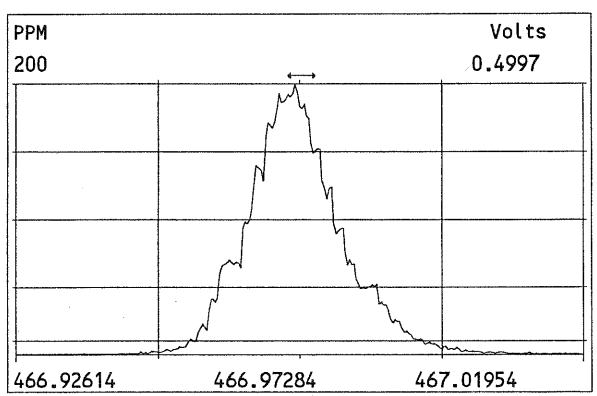


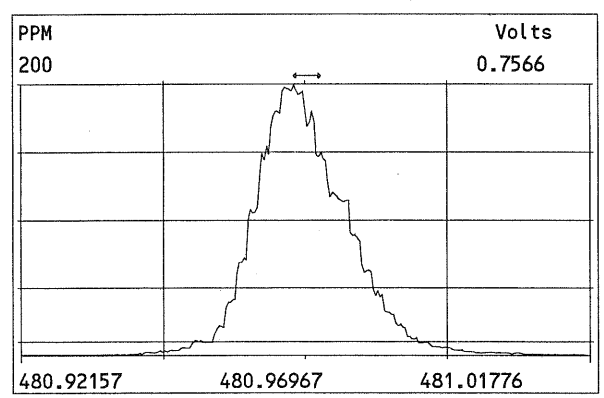
Peak Locate Examination:27-JUL-2006:10:33 File:27JUL06M
Experiment:PCDD Function:5 Reference:PFK

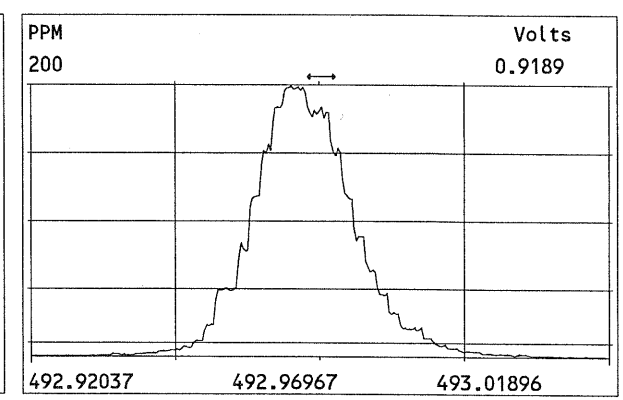


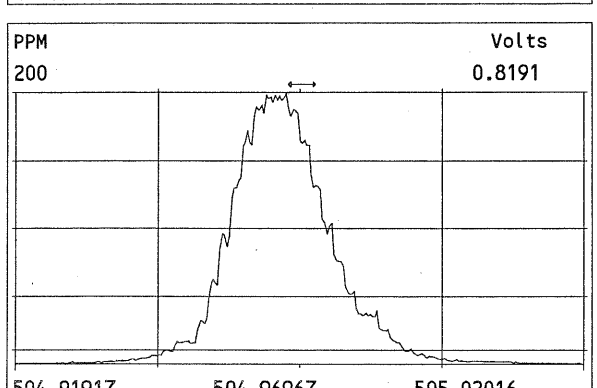


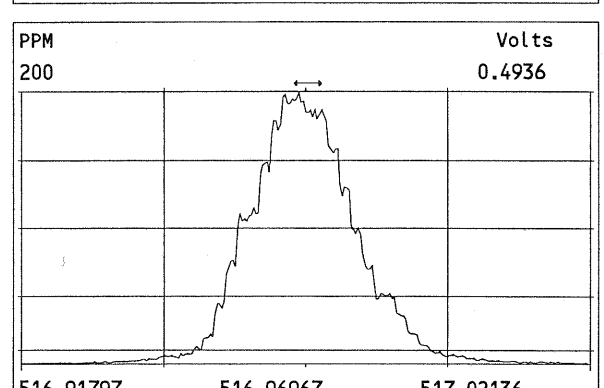




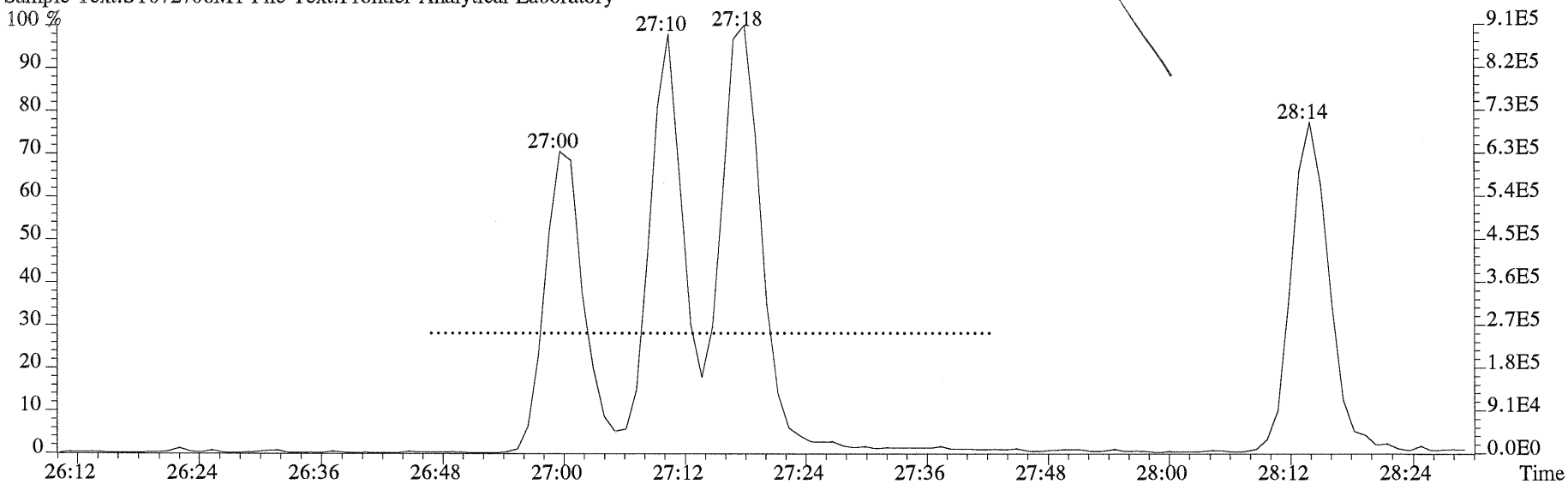




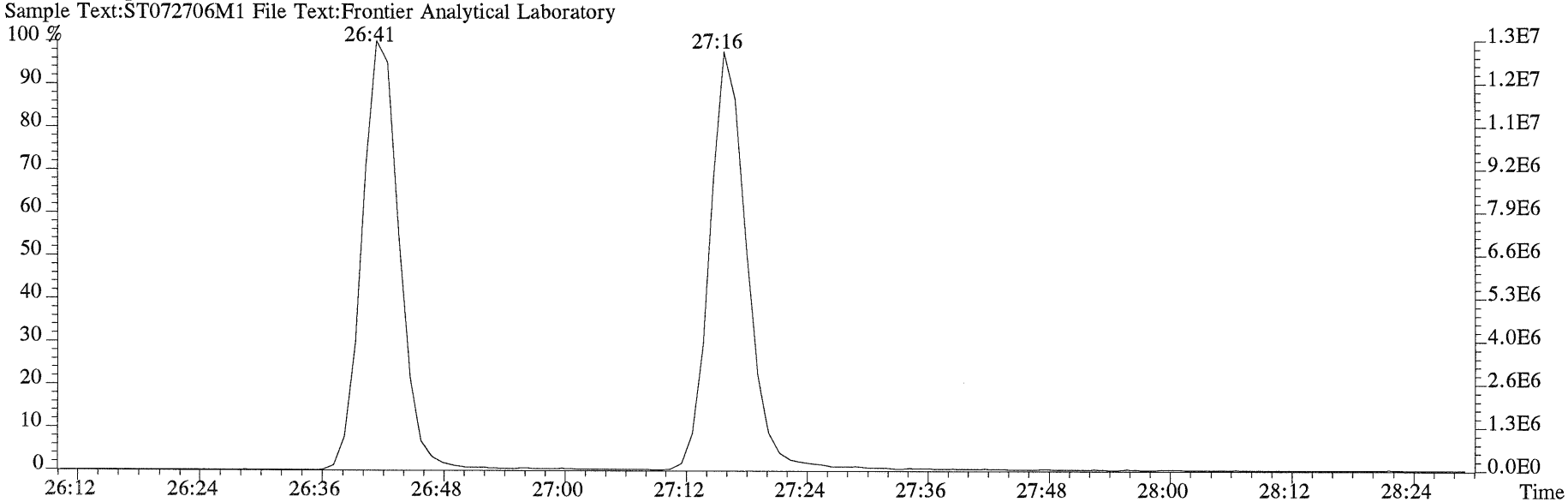




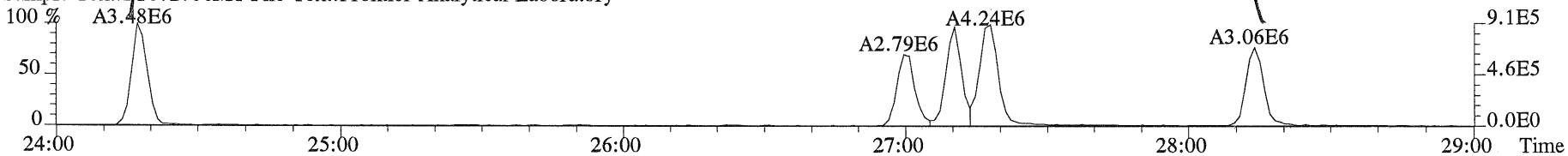
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
319.8965 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



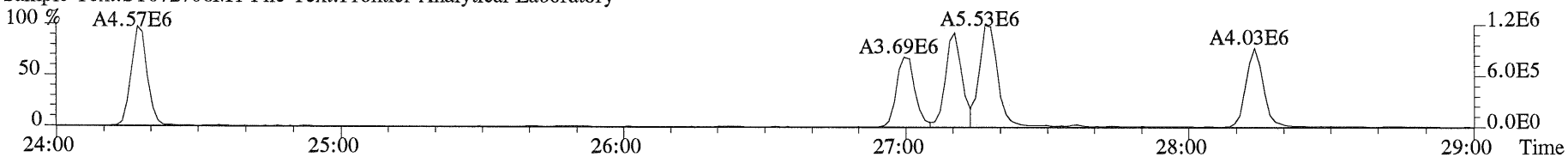
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
333.9339 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



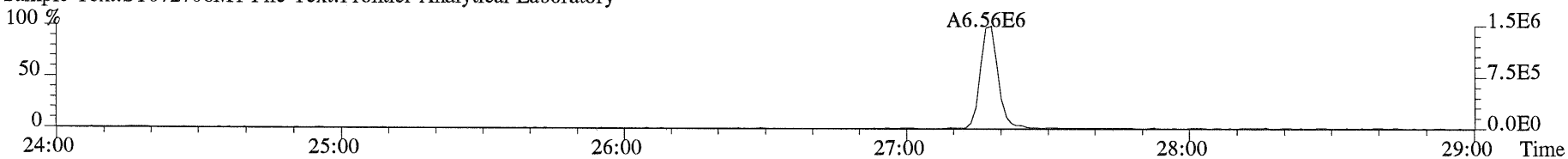
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
319.8965 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



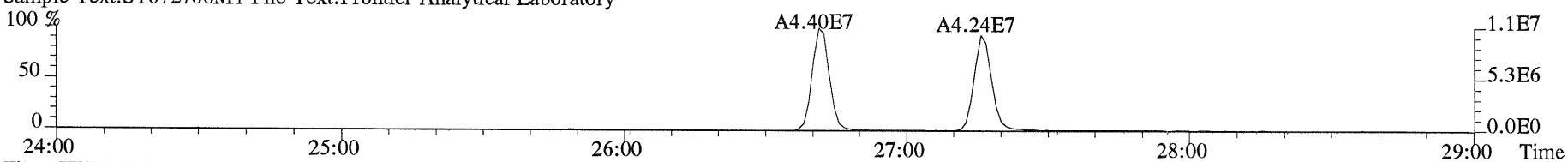
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
321.8936 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



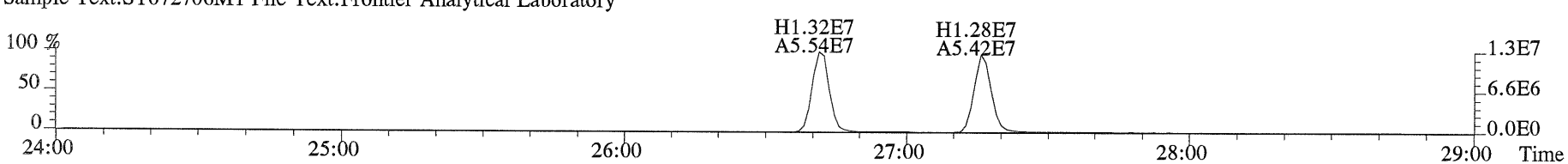
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
327.8847 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



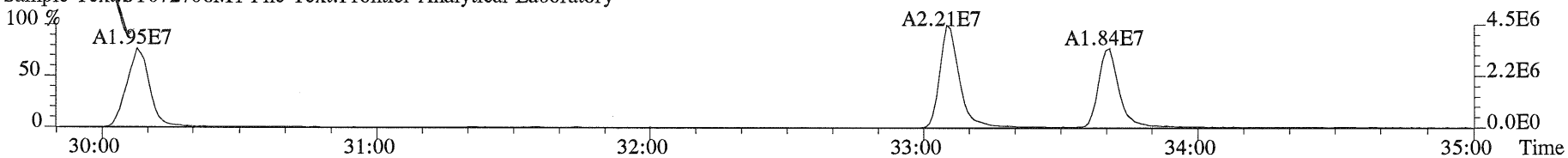
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
331.9368 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



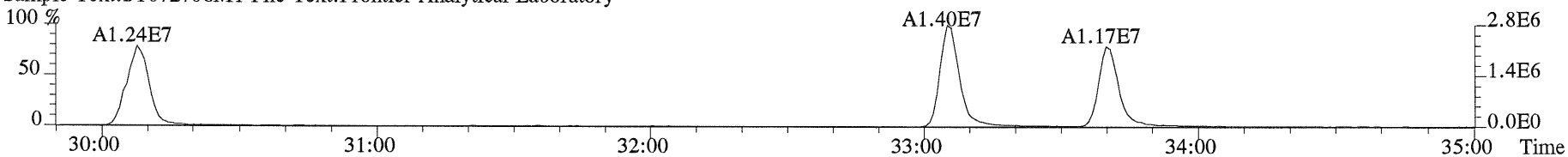
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
333.9339 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



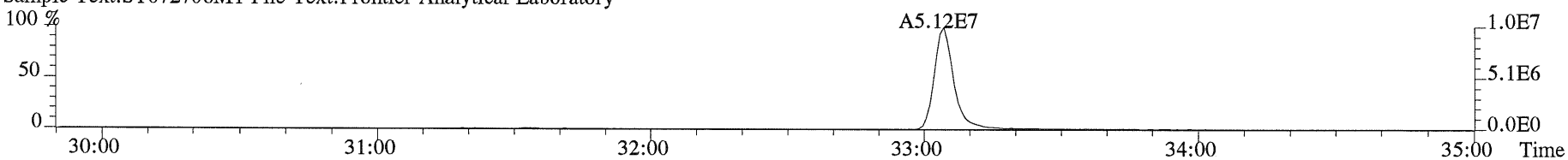
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
355.8546 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



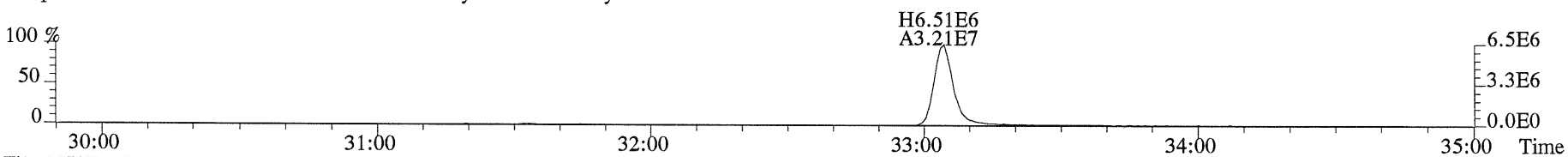
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
357.8517 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



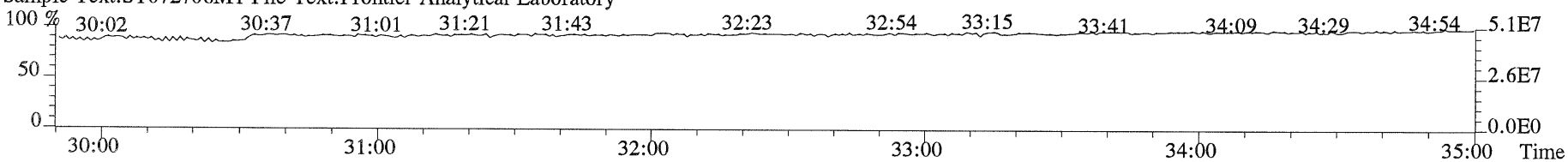
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
367.8949 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



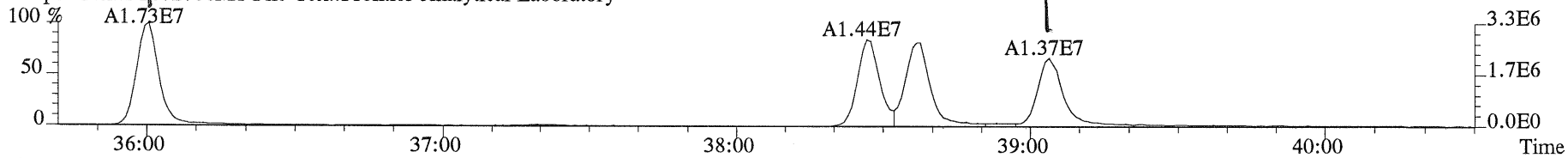
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
369.8919 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



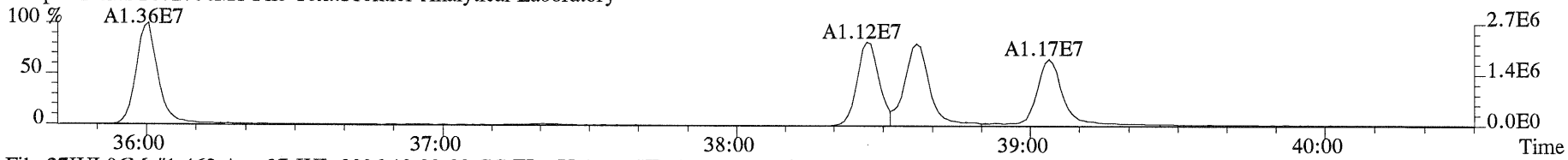
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
366.9792 F:2 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



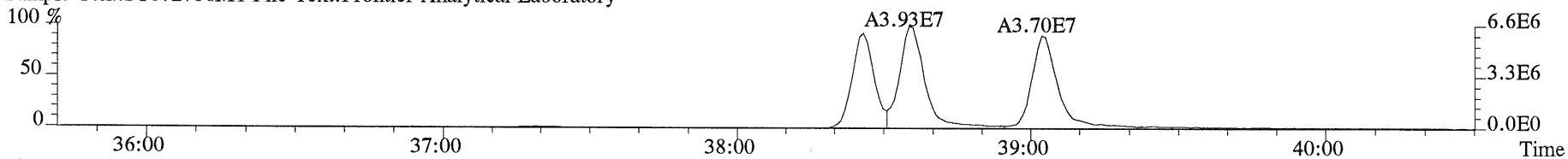
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
389.8156 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



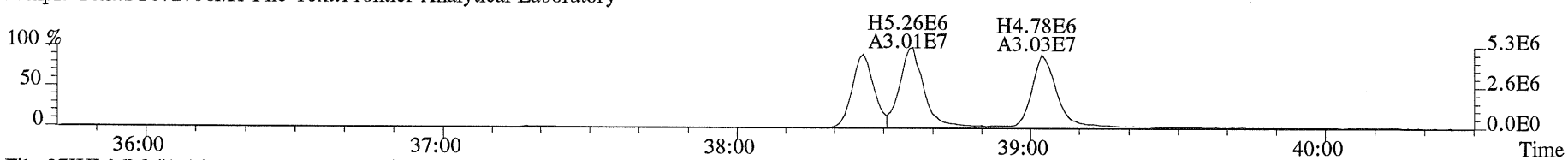
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
391.8127 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



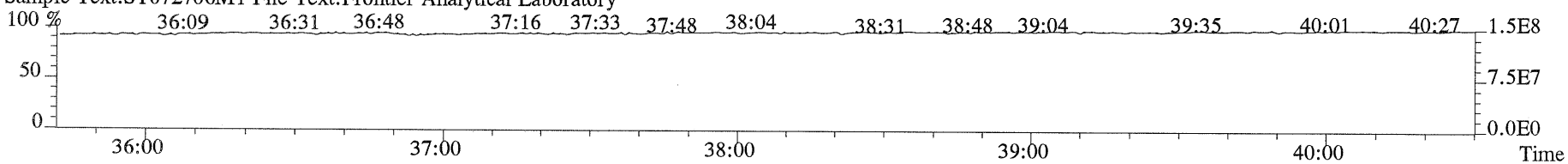
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
401.8559 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



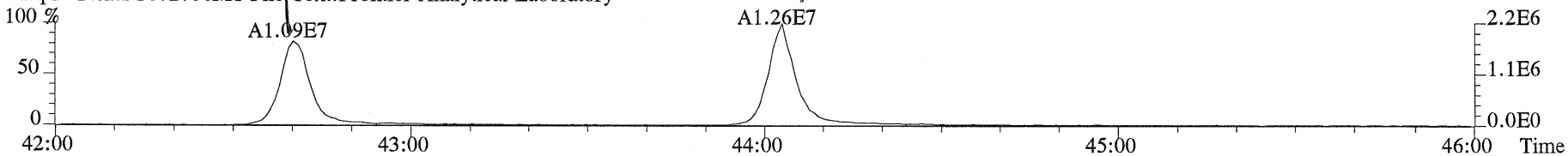
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
403.8530 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



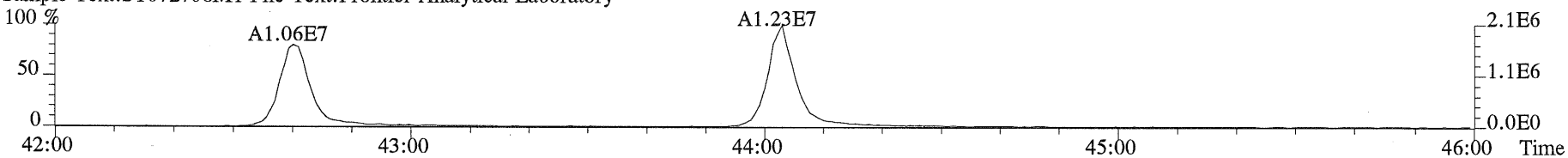
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
380.9760 F:3 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



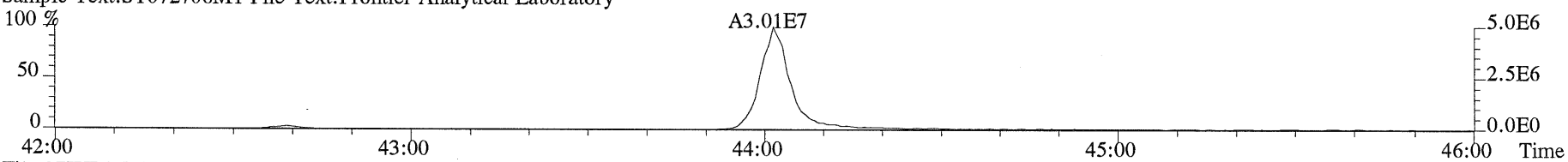
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
423.7767 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



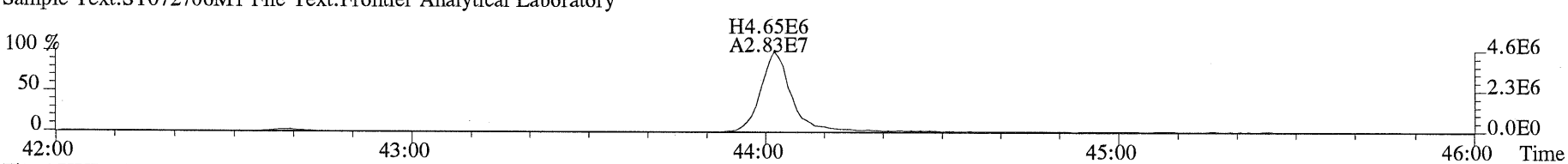
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
425.7737 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



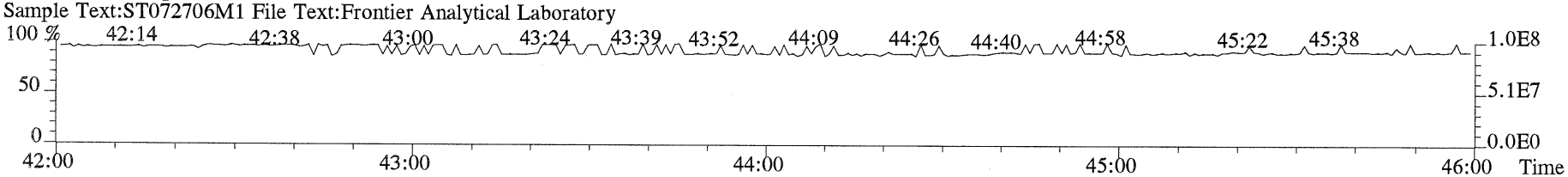
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
435.8169 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



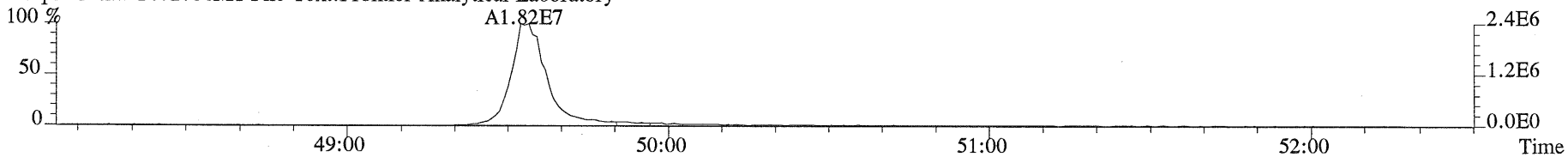
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
437.8140 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



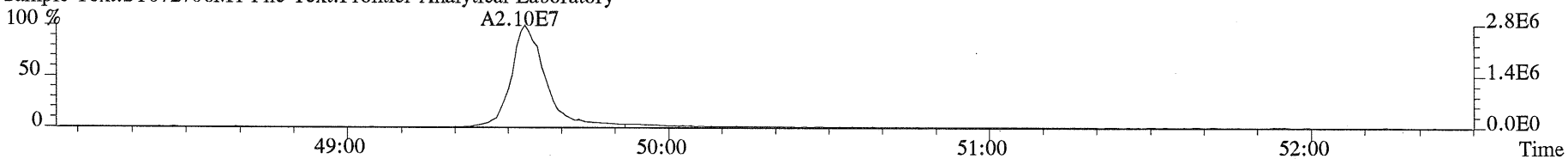
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
430.9728 F:4 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



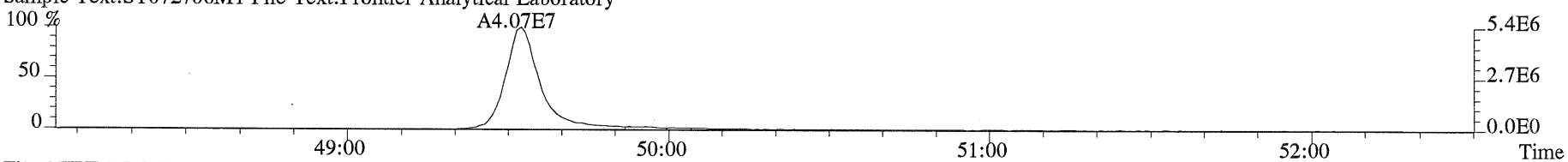
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
457.7377 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



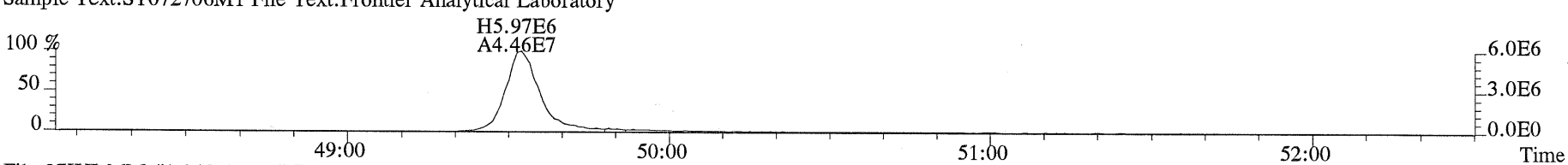
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
459.7348 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



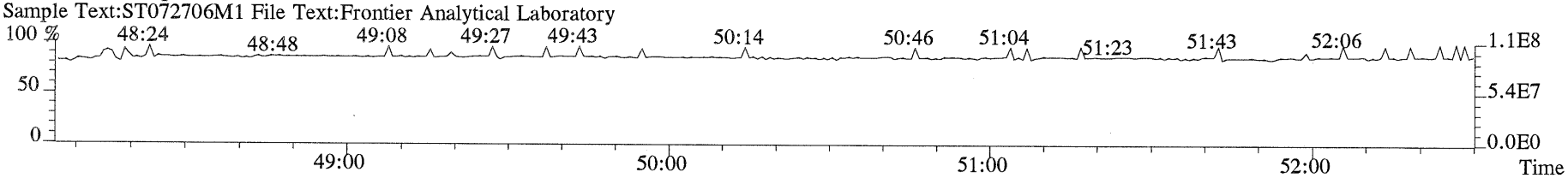
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
469.7780 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



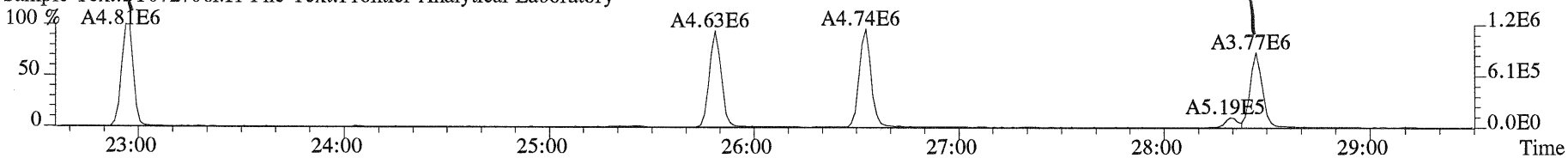
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
471.7750 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



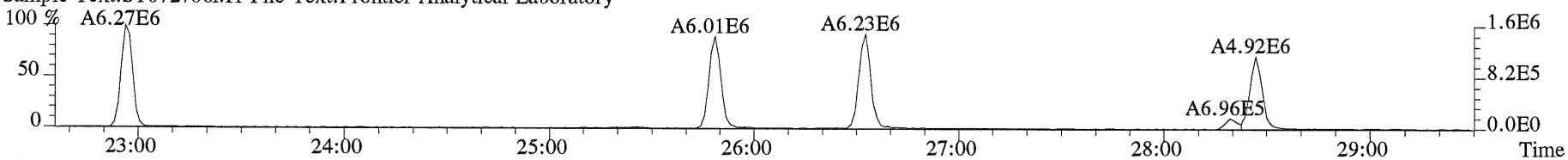
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
454.9728 F:5 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



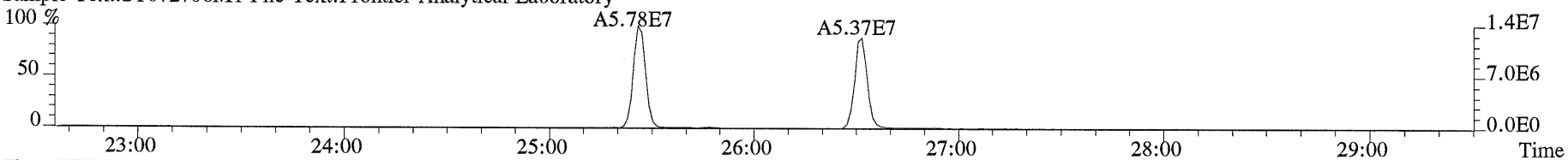
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
303.9016 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



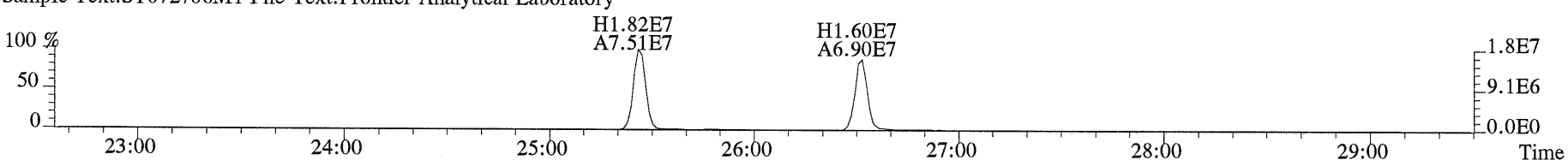
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
305.8987 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



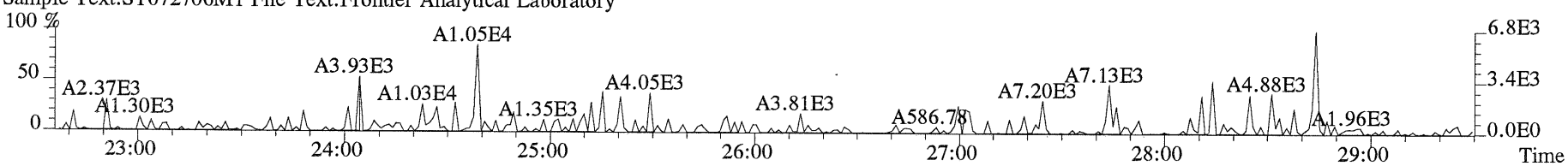
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
315.9419 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
317.9389 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
375.8364 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



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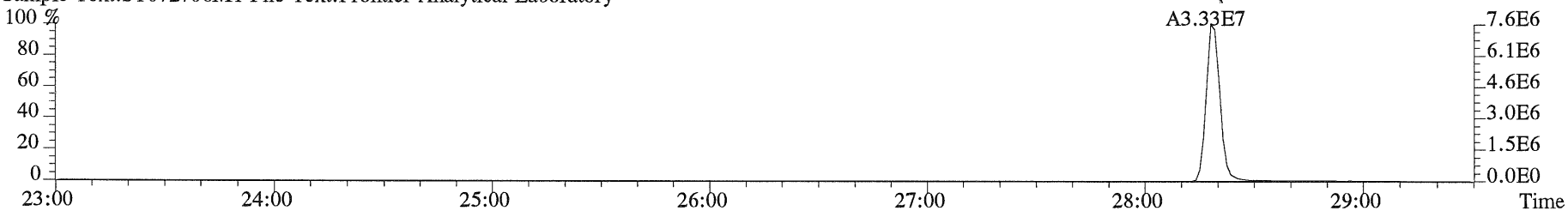
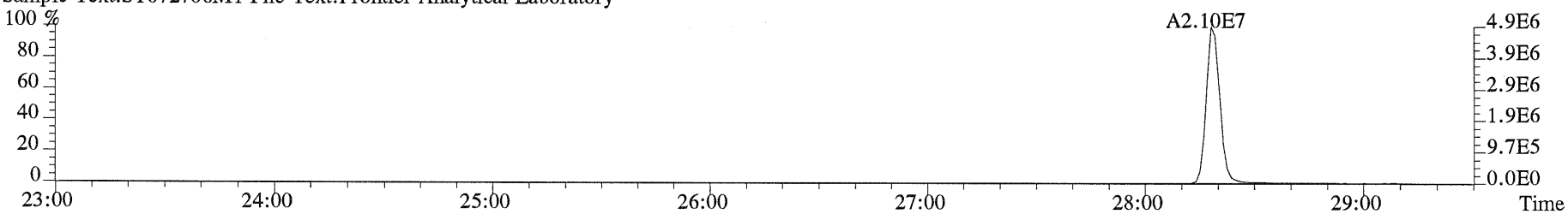
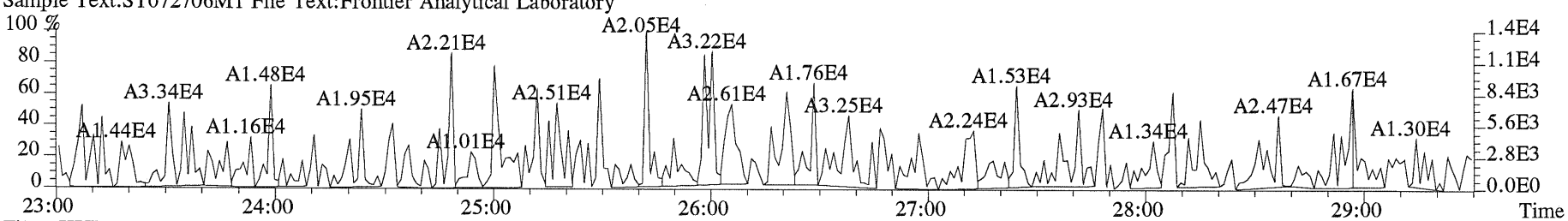
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
339.8597 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



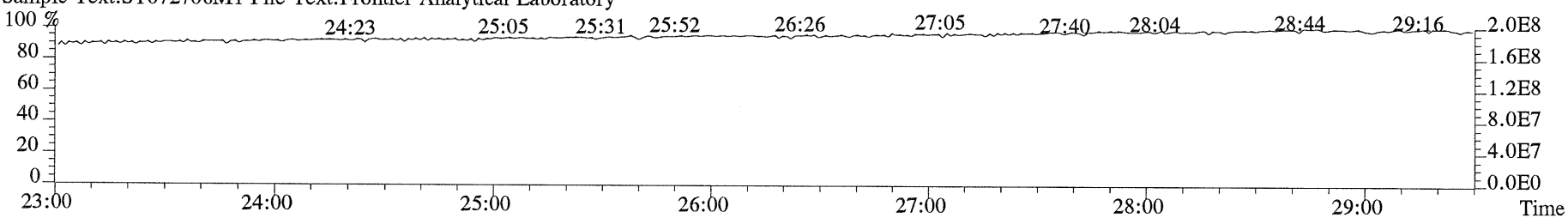
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
341.8568 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



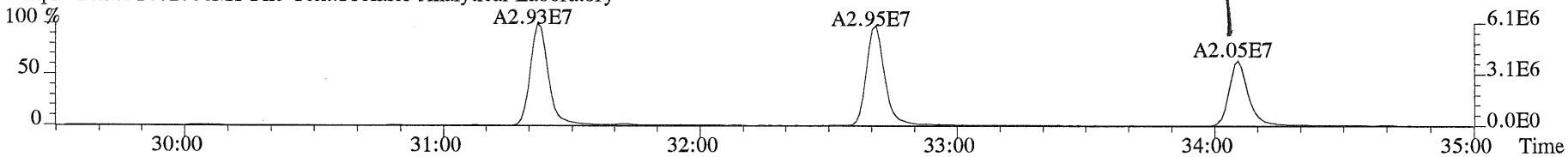
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
409.7974 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



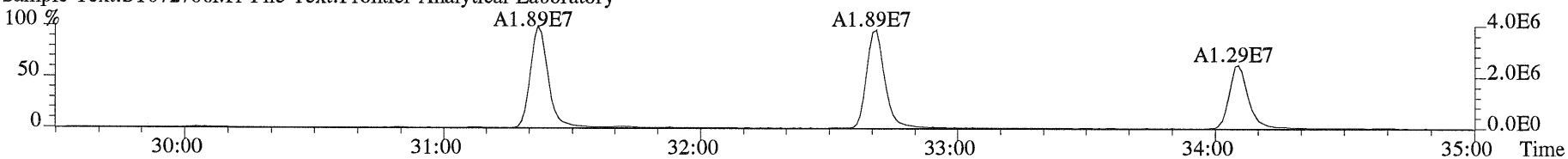
File:27JUL06M #1-390 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
330.9792 Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



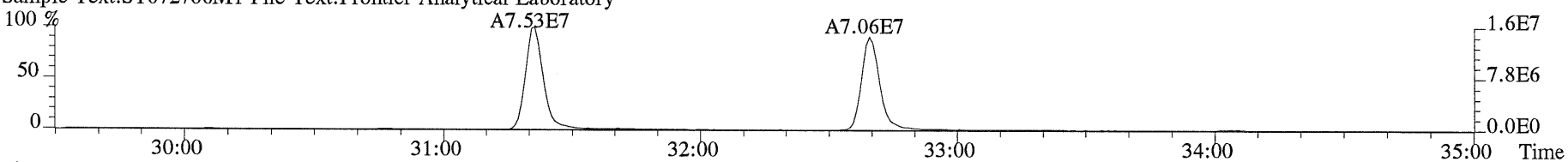
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
339.8597 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



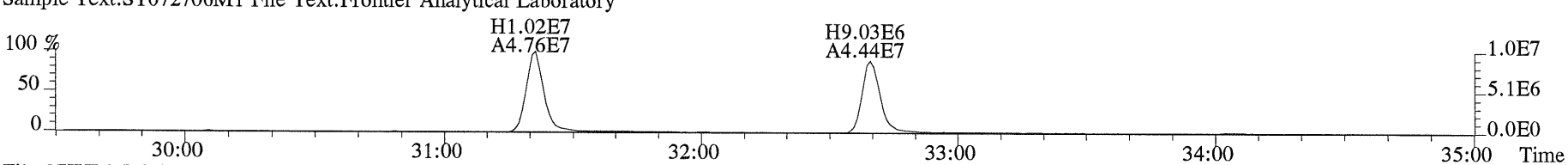
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
341.8568 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



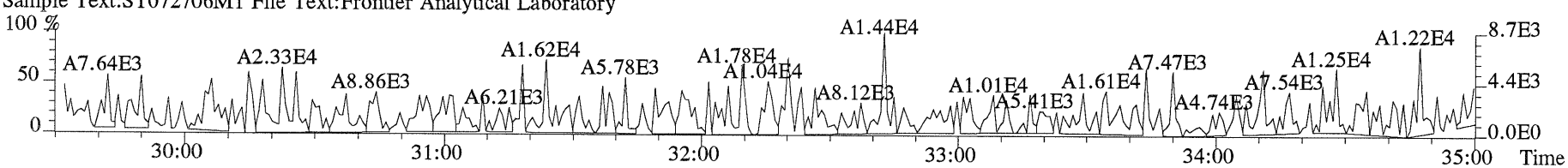
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
351.9000 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



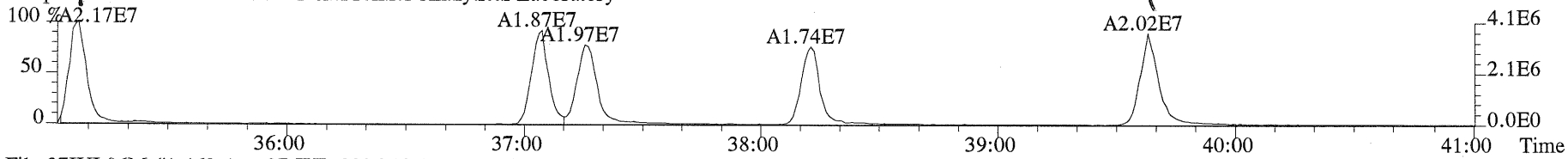
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
353.8970 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



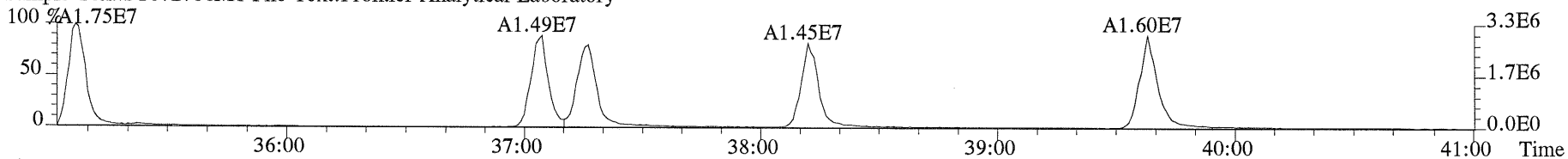
File:27JUL06M #1-425 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
409.7974 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



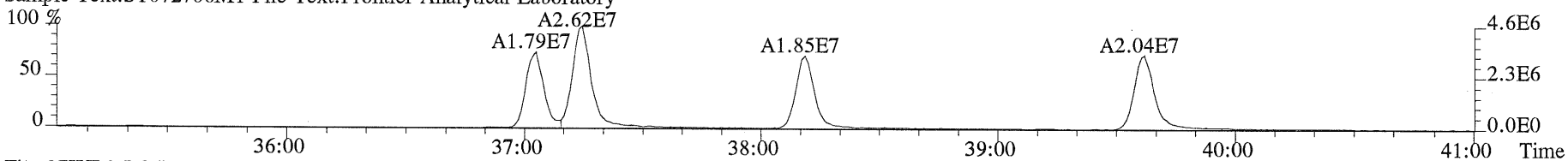
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
373.8207 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



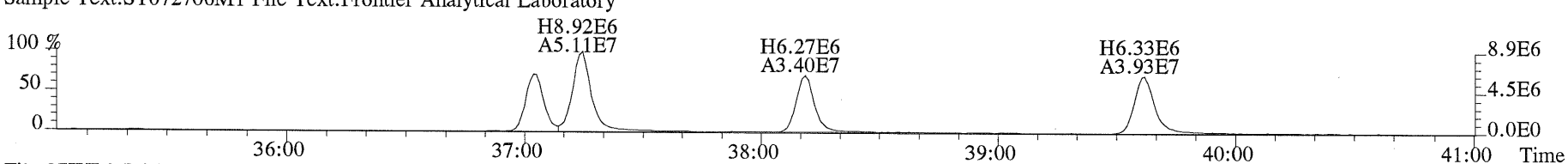
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
375.8178 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



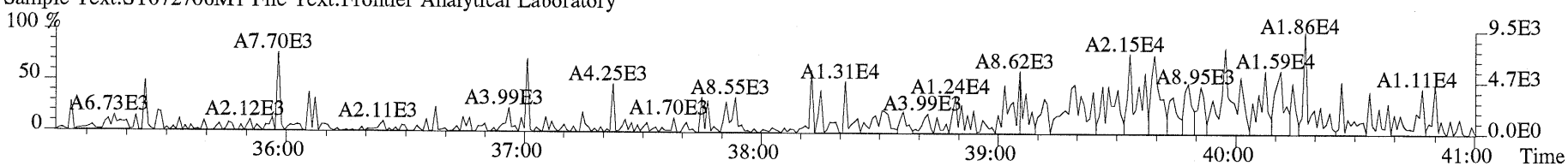
File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
383.8639 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
385.8610 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-463 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
445.7555 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



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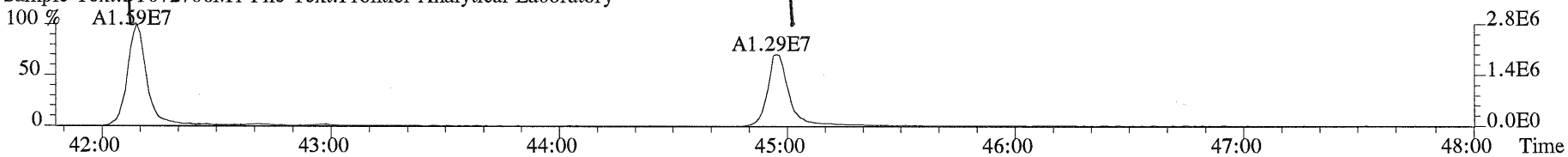
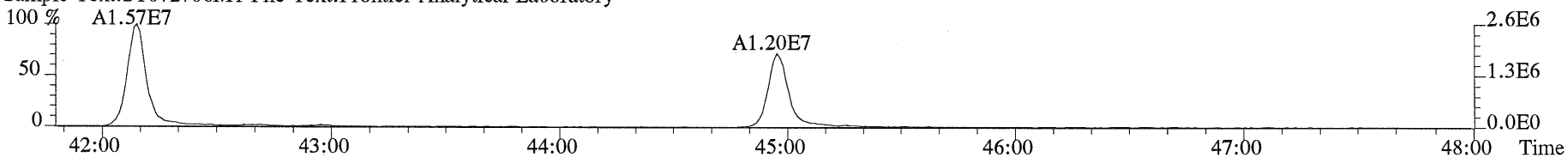
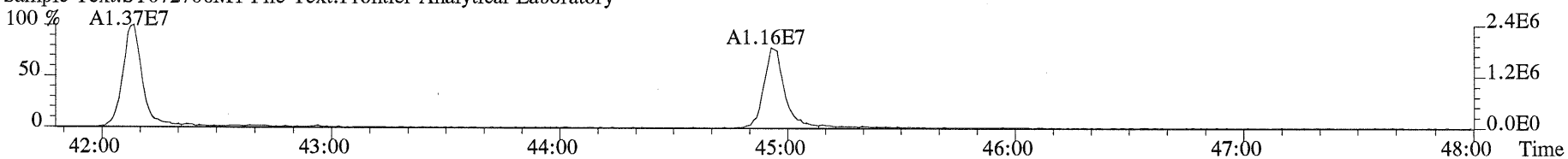
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
407.7818 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



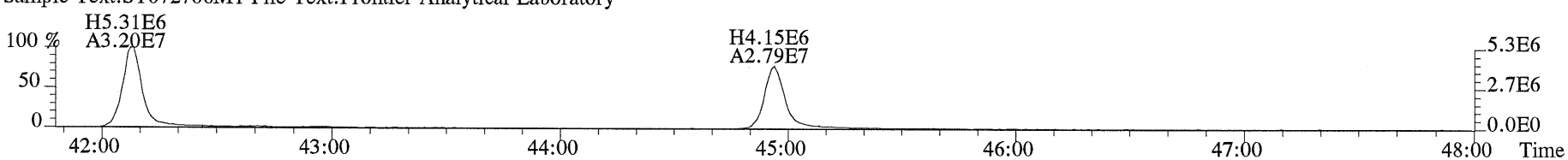
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
409.7788 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



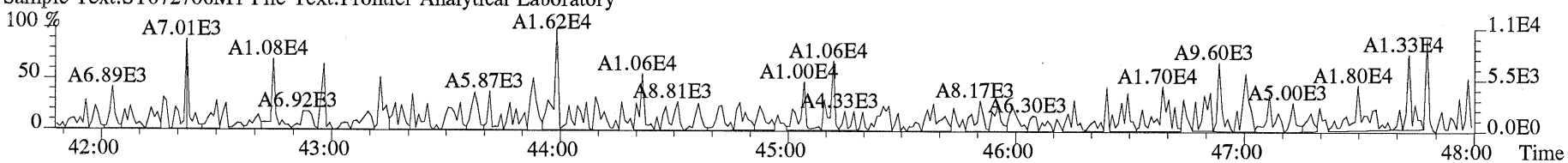
File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
417.8253 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
419.8220 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-541 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
479.7165 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



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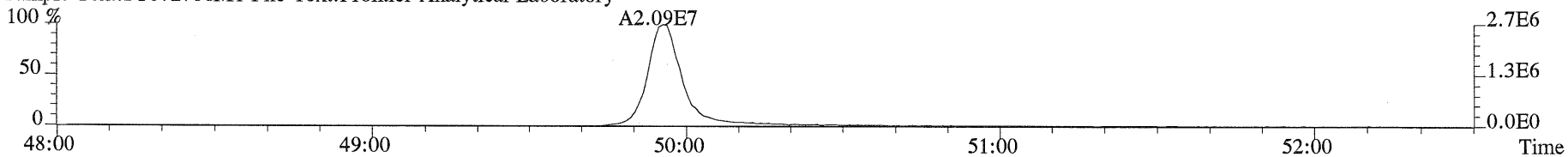
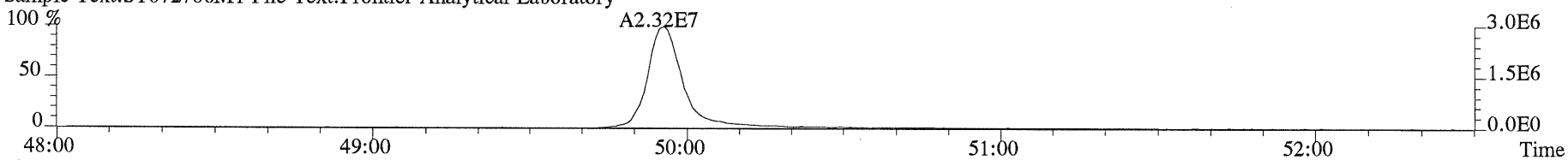
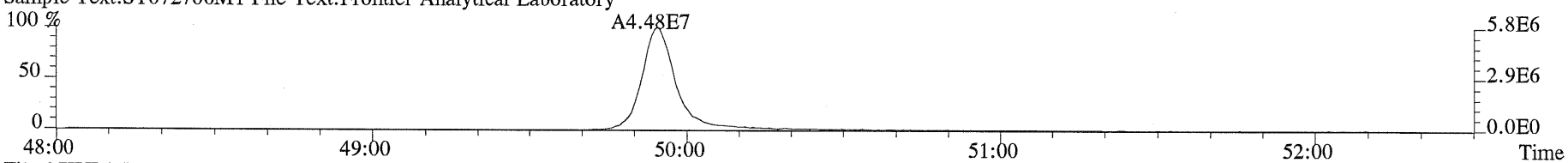
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
441.7428 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



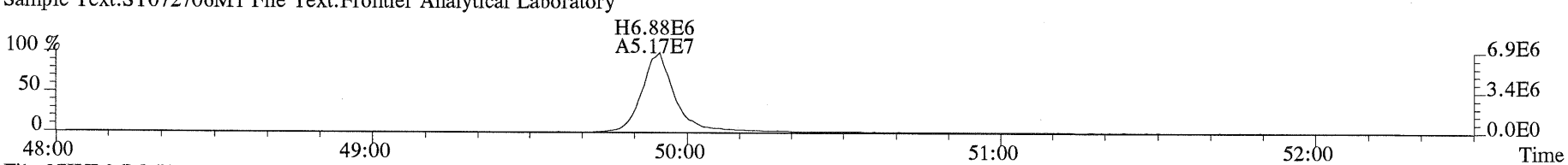
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
443.7398 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



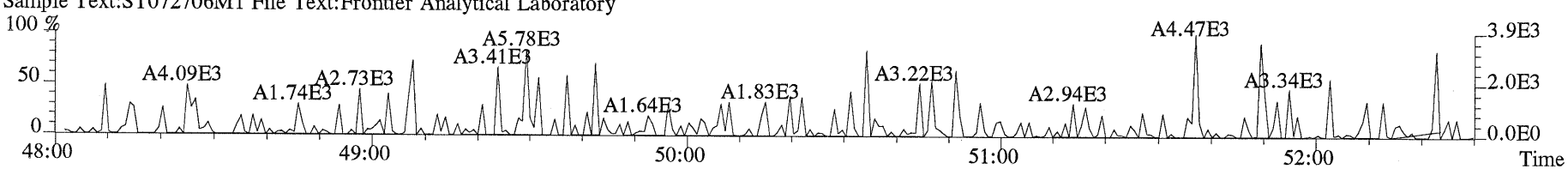
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
453.7831 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory



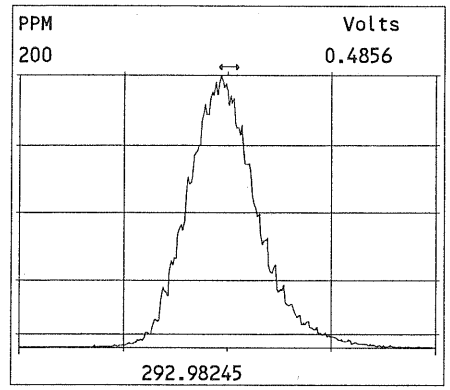
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
455.7801 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory

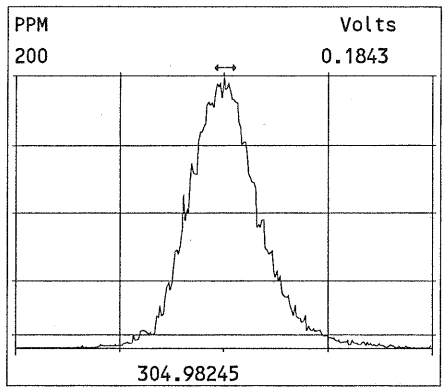


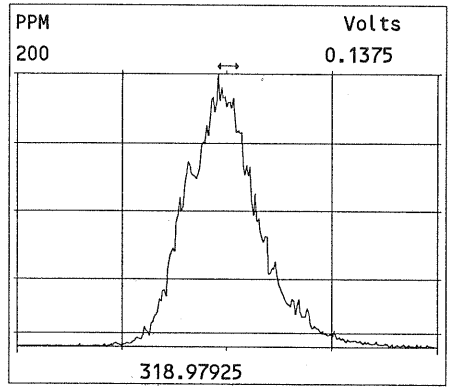
File:27JUL06M #1-348 Acq:27-JUL-2006 10:33:29 GC EI+ Voltage SIR Autospec-Ultima
513.6775 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M1 File Text:Frontier Analytical Laboratory

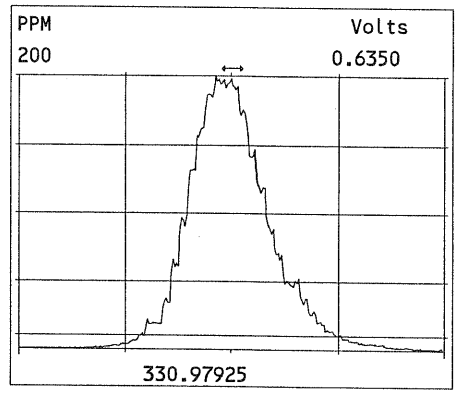


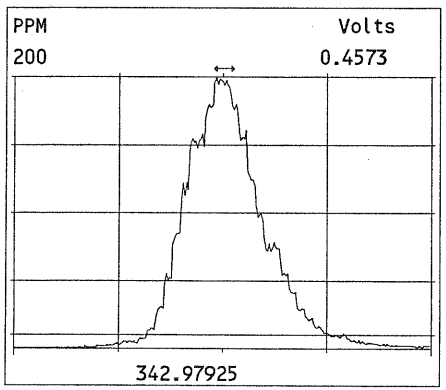
Peak Locate Examination:28-JUL-2006:03:12 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

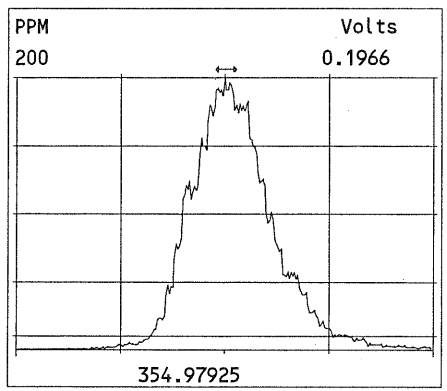


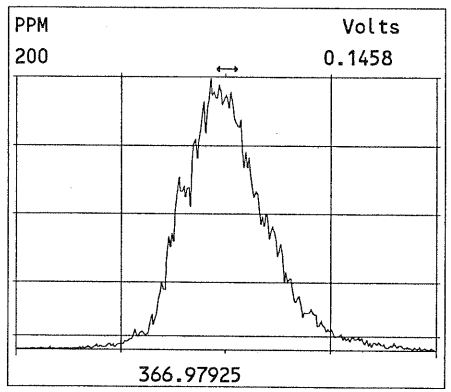


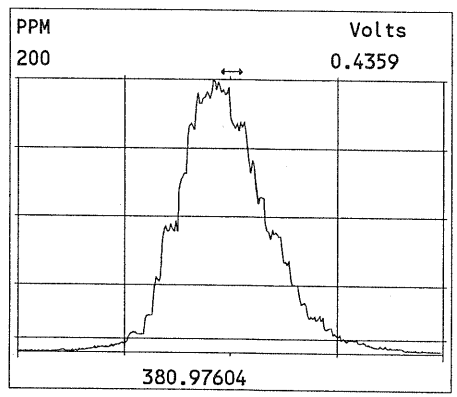


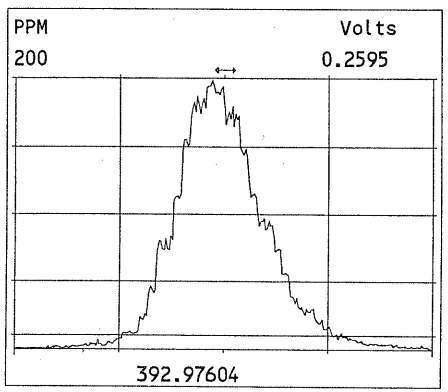


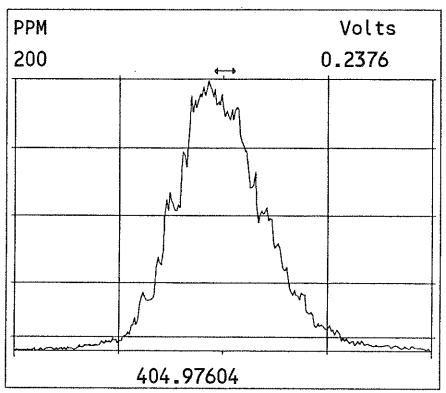


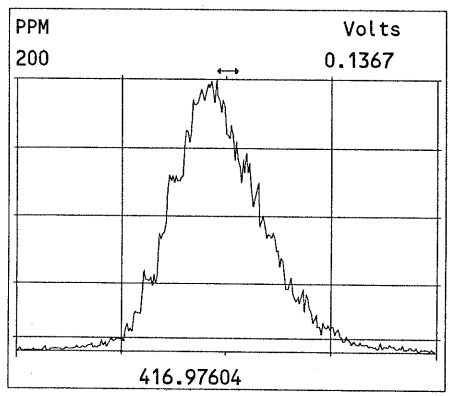




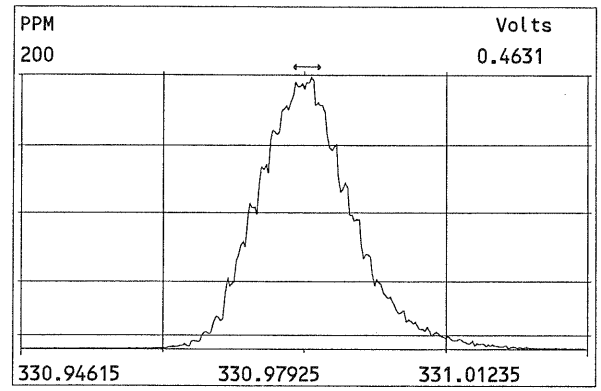


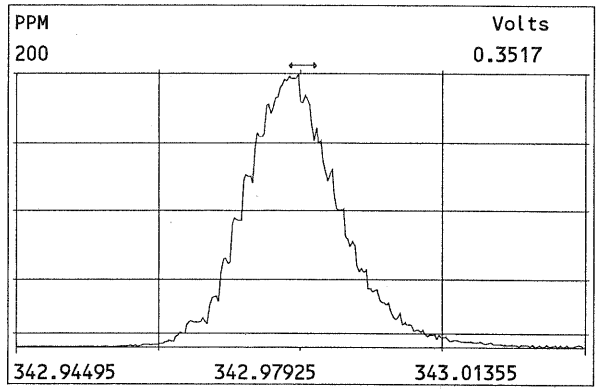


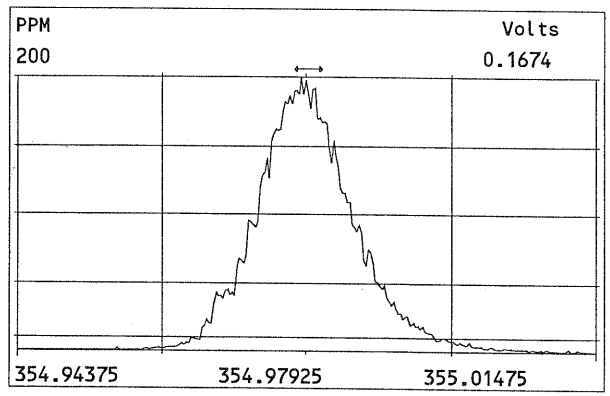


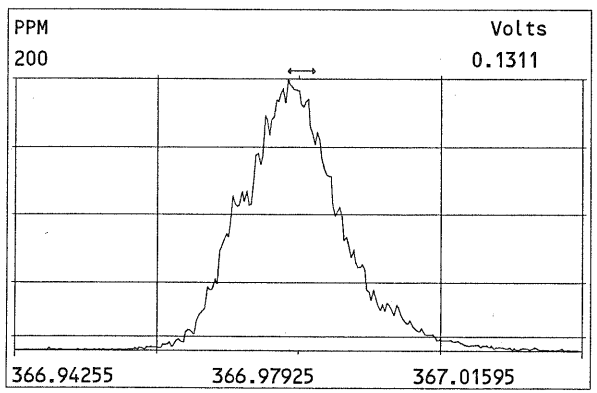


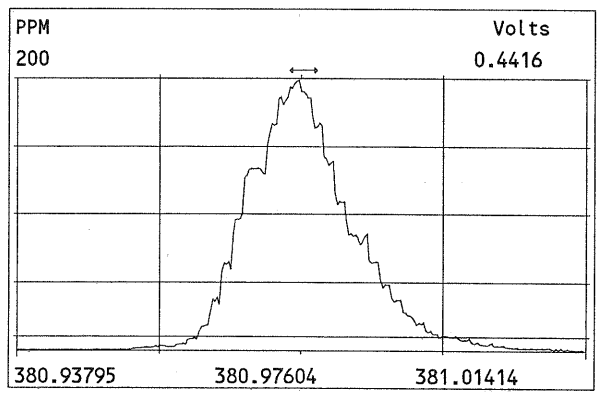
Peak Locate Examination:28-JUL-2006:03:14 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

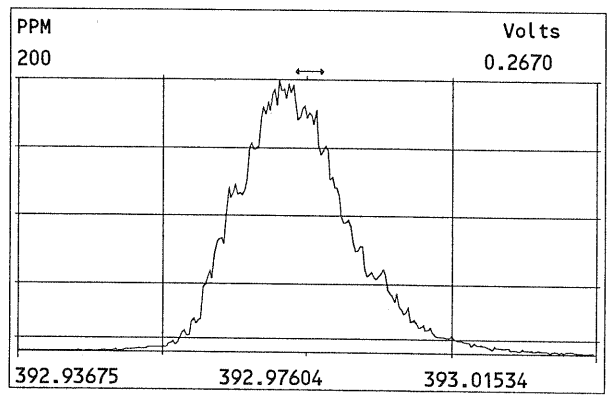


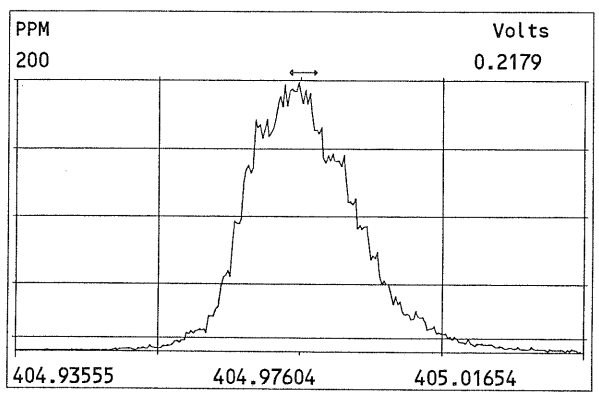


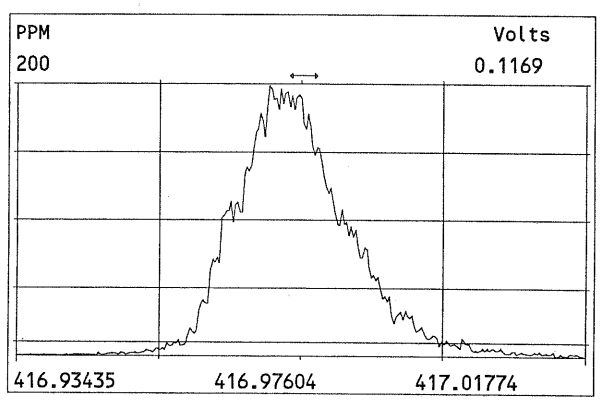




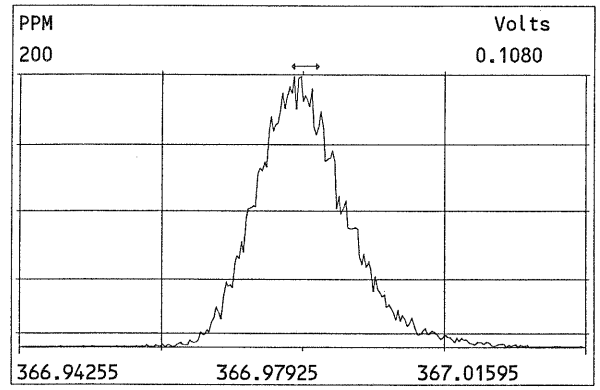


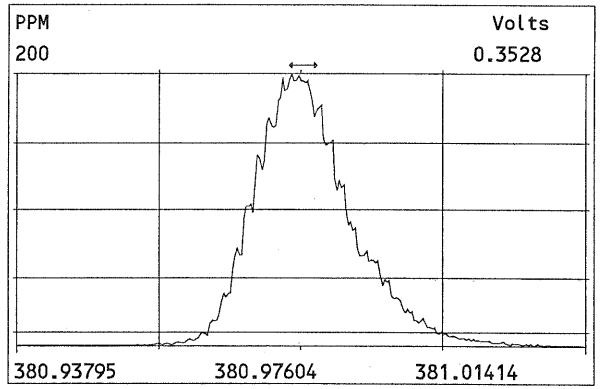


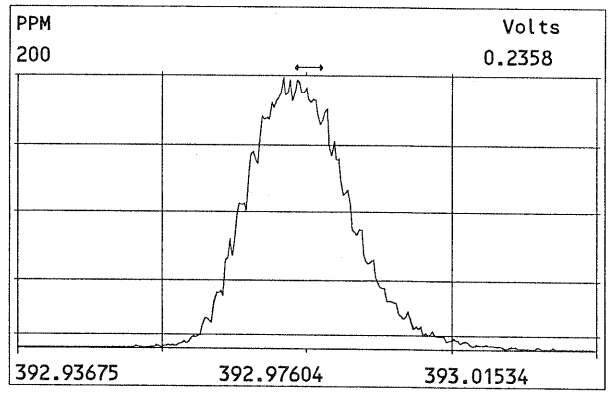


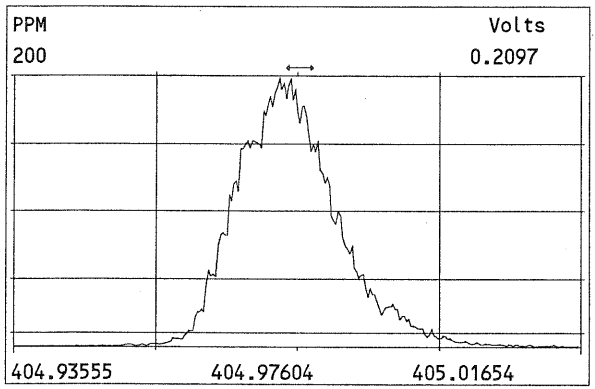


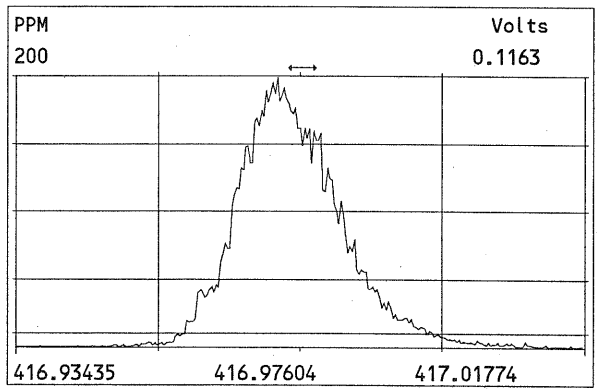
Peak Locate Examination:28-JUL-2006:03:16 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

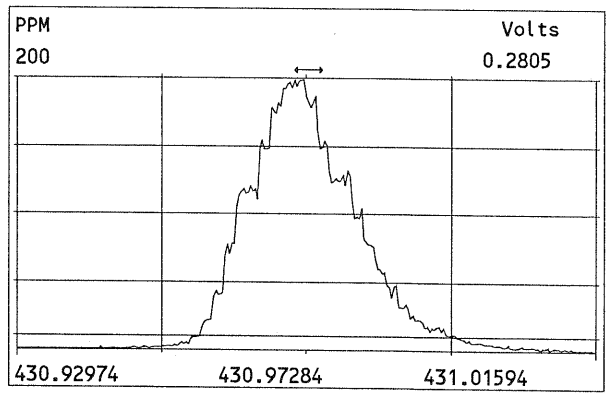


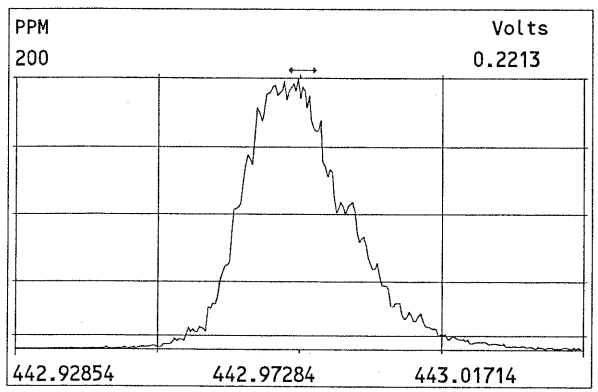


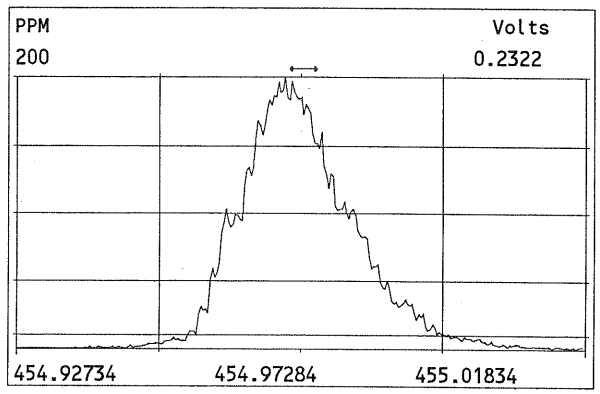




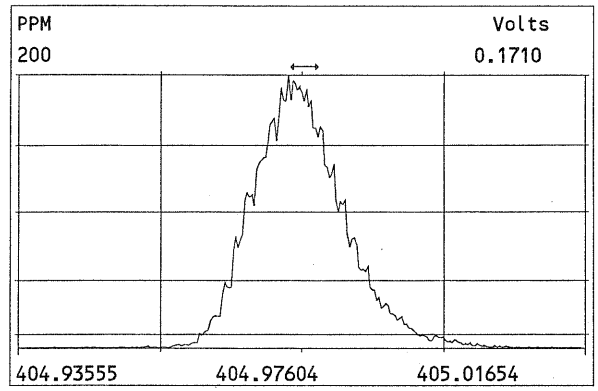


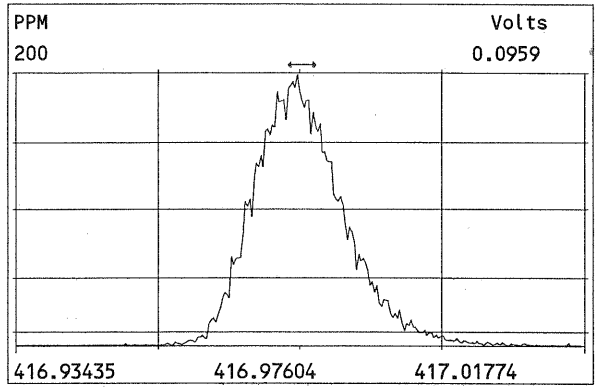


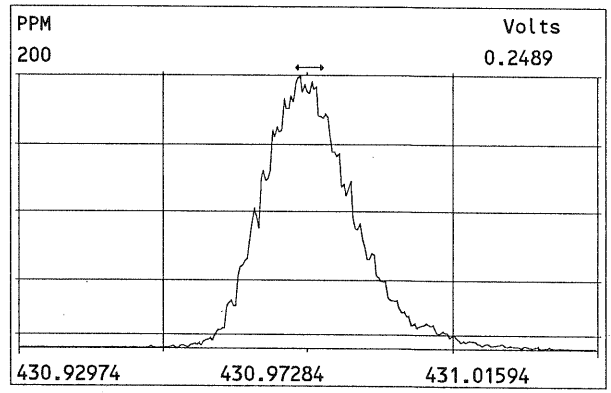


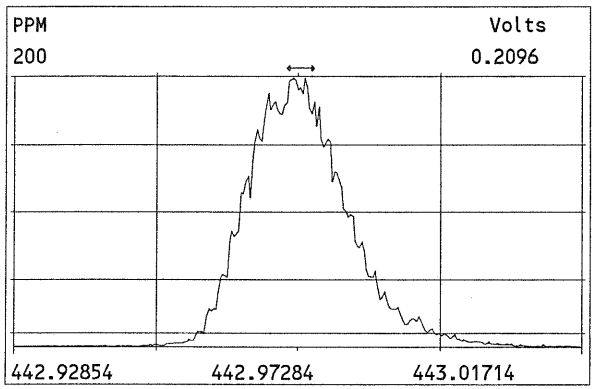


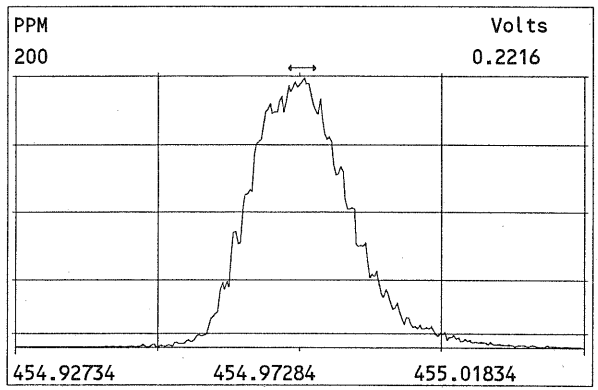
Peak Locate Examination:28-JUL-2006:03:17 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

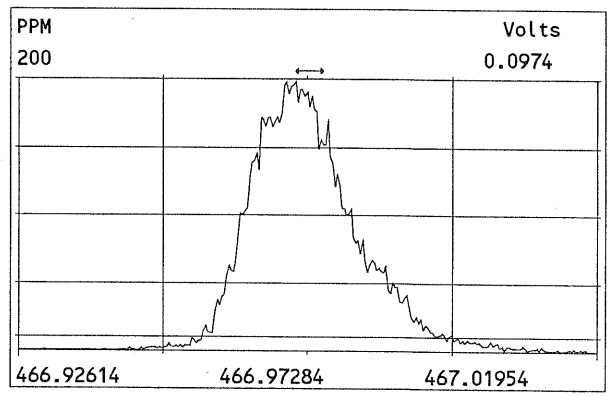


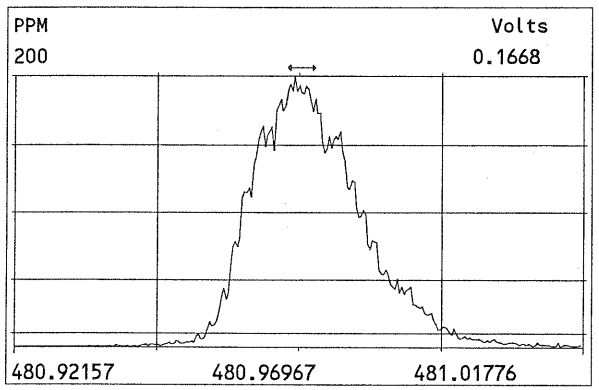




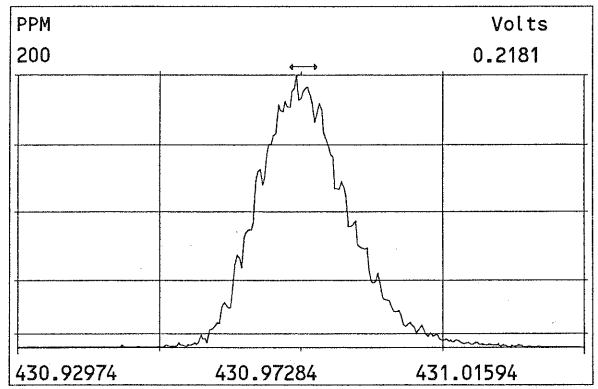


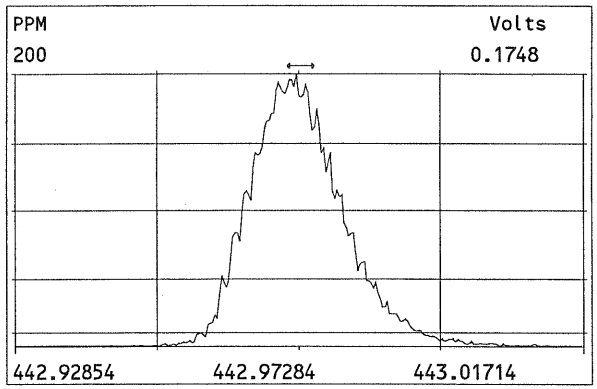


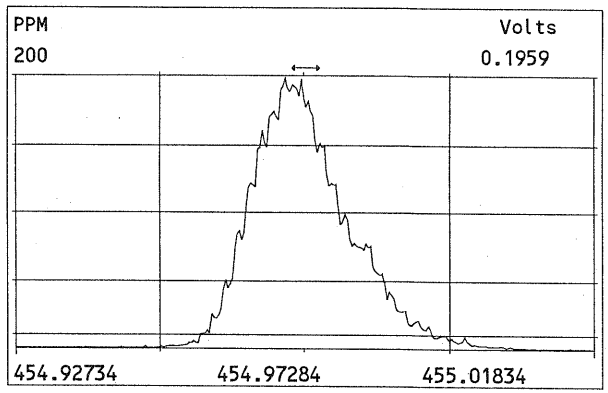


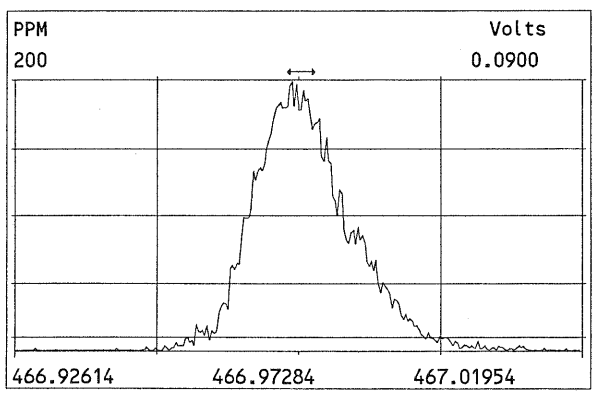


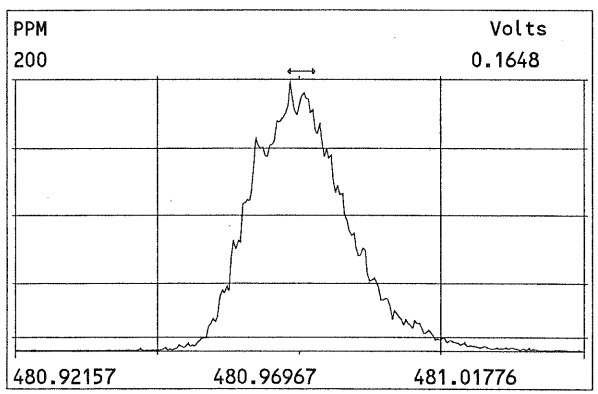
Peak Locate Examination:28-JUL-2006:03:19 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

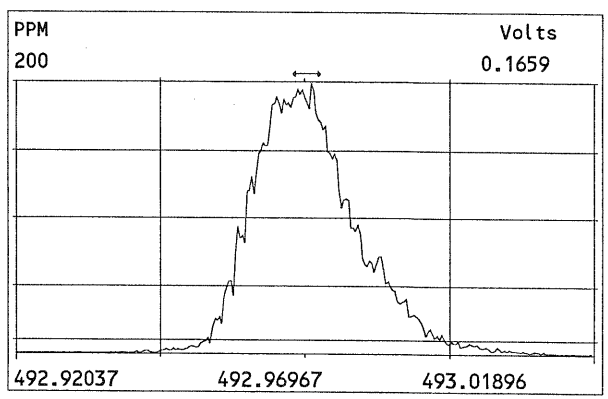


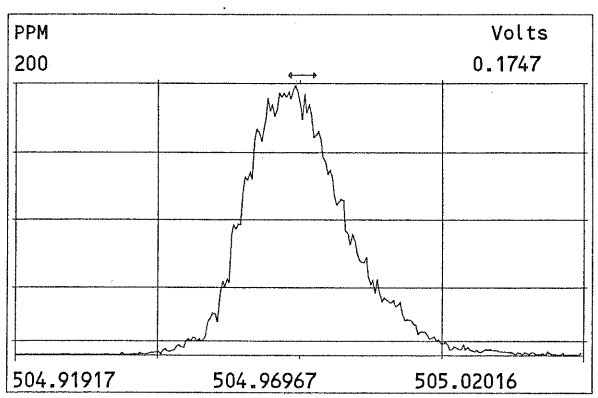


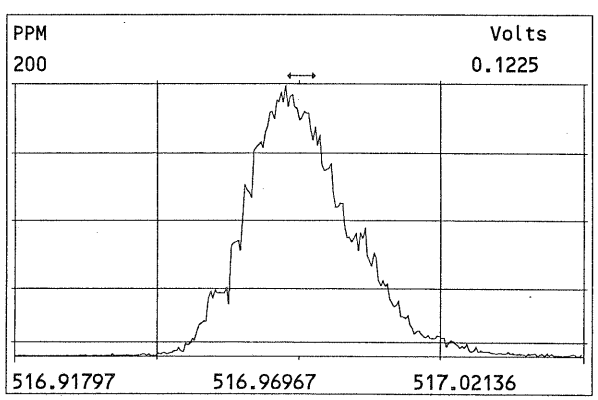












USEPA - ITD

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 17:01:01

NATIVE ANALYTES	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	y	8.71	7.80 - 12.9
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	46.3	39.0 - 65.0
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	47.3	39.0 - 64.0
1,2,3,6,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	y	47.7	39.0 - 64.0
1,2,3,7,8,9-HxCDD	M+2/M+4	1.21	1.05-1.43	y	51.0	41.0 - 61.0
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	y	48.6	43.0 - 58.0
OCDD	M+2/M+4	0.87	0.76-1.02	y	101	79.0 - 126
2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	8.56	8.40 - 12.0
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	46.4	41.0 - 60.0
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	y	46.0	41.0 - 60.0
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	y	49.5	45.0 - 56.0
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	y	48.7	44.0 - 57.0
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	y	48.4	44.0 - 57.0
1,2,3,7,8,9-HxCDF	M+2/M+4	1.27	1.05-1.43	y	50.6	45.0 - 56.0
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88-1.20	y	50.6	45.0 - 55.0
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	y	50.4	43.0 - 58.0
OCDF	M+2/M+4	0.90	0.76-1.02	y	101	63.0 - 159

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

Analyst: [signature] Date: 7/28/06

USEPA - ITD

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Initial Calibration Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

VER Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 17:01:01

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	ACCEPT	CONC. FOUND	CONC. RANGE (ng/mL) (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	y	101	82.0 - 121
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	y	94.2	62.0 - 160
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	90.9	85.0 - 117
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	y	94.4	85.0 - 118
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	y	100	72.0 - 138
13C-OCDD	M+2/M+4	0.87	0.76-1.02	y	201	96.0 - 415
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	y	102	71.0 - 140
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	y	98.7	76.0 - 130
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	y	98.5	77.0 - 130
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	81.0	76.0 - 131
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43-0.59	y	84.1	70.0 - 143
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.51	0.43-0.59	y	86.2	73.0 - 137
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43-0.59	y	84.8	74.0 - 135
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	y	89.0	78.0 - 129
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37-0.51	y	96.2	77.0 - 129
13C-OCDF	M+2/M+4	0.88	0.76-1.02	y	193	96.0 - 415
CLEANUP STANDARD (4)						
37Cl-2,3,7,8-TCDD					8.44	7.80 - 12.8

(1) See Table 8, Method 1613, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

(3) Contract-required concentration range as specified in Table 6, Method 1613.

(4) No ion abundance ratio; report concentration found.

Analyst: _____ Date: 7/28/06

FORM 5

PCDD/PCDF RT WINDOW AND ISOMER SPECIFICITY STANDARDS

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.:

Instrument ID: FAL3 Initial Calibration Date: 7/5/06

RT Window Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 Time: 17:01:01

DB-5 IS Data Filename: 27JUL06M Sam:8 Analysis Date: 27-JUL-06 Time: 17:01:01

DB-225 IS Date Filename: Analysis Date: Time:

DB-5 RT WINDOW DEFINING STANDARDS RESULTS

ISOMERS	ABSOLUTE RT	ISOMERS	ABSOLUTE RT
1,3,6,8-TCDD (F)	24:18	1,3,6,8-TCDF (F)	22:57
1,2,8,9-TCDD (L)	28:15	1,2,8,9-TCDF (L)	28:28
1,2,4,7,9-PeCDD (F)	30:09	1,3,4,6,8-PeCDF (F)	28:19
1,2,3,8,9-PeCDD (L)	33:41	1,2,3,8,9-PeCDF (L)	34:06
1,2,4,6,7,9-HxCDD (F)	36:01	1,2,3,4,6,8-HxCDF (F)	35:08
1,2,3,7,8,9-HxCDD (L)	39:05	1,2,3,7,8,9-HxCDF (L)	39:39
1,2,3,4,6,7,9-HpCDD (F)	42:42	1,2,3,4,6,7,8-HpCDF (F)	42:11
1,2,3,4,6,7,8-HpCDD (L)	44:04	1,2,3,4,7,8,9-HpCDF (L)	44:59

(F) = First eluting iosmer (DB-5); (L) = Last eluting isomer (DB-5)

==========

ISOMER SPECIFICITY (IS) TEST STANDARD RESULTS

% VALLEY HEIGHT BETWEEN COMPARED PEAKS (1)

<25%

(1) To meet contract requirement, %Valley Height Between Compared Peaks shall not exceed 25% (section 15.4.2.2, Method 1613).

Analyst: _____ Date: 7/28/06

USEPA - ITD

FORM 6A
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 17:01:01 CS3 or VER Data Filename: 27JUL06M Sam:8

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
2,3,7,8-TCDD	13C-2,3,7,8-TCDD	1.001	0.999-1.002
2,3,7,8-TCDF	13C-2,3,7,8-TCDF	1.001	0.999-1.003
1,2,3,7,8-PeCDD	13C-1,2,3,7,8-PeCDD	1.001	0.999-1.002
1,2,3,7,8-PeCDF	13C-1,2,3,7,8-PeCDF	1.000	0.999-1.002
2,3,4,7,8-PeCDF	13C-2,3,4,7,8-PeCDF	1.000	0.999-1.002
LABELED COMPOUNDS			
37Cl-2,3,7,8-TCDD	13C-1,2,3,4-TCDD	1.022	0.989-1.052
13C-2,3,7,8-TCDD		1.021	0.976-1.043
13C-2,3,7,8-TCDF		0.993	0.923-1.103
13C-1,2,3,7,8-PeCDD		1.239	1.000-1.567
13C-1,2,3,7,8-PeCDF		1.175	1.000-1.425
13C-2,3,4,7,8-PeCDF		1.224	1.011-1.526

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [illegible] Date: 7/28/06

USEPA - ITD

FORM 6B
PCDD/PCDF RELATIVE RETENTION TIMES

Lab Name: Frontier Analytical Laboratory Episode No.:

Contract No.: SAS No.: Init. Cal. Date: 7/5/06

Instrument ID: FAL3 GC Column ID: DB5

Analysis Date: 27-JUL-06 17:01:01 CS3 or VER Data Filename: 27JUL06M Sam:8

NATIVE ANALYTES	RETENTION TIME REFERENCE	RRT	RRT QC LIMITS (1)
1,2,3,4,7,8-HxCDD	13C-1,2,3,4,7,8-HxCDD	1.000	0.999-1.001
1,2,3,6,7,8-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.001	0.998-1.004
1,2,3,7,8,9-HxCDD	13C-1,2,3,6,7,8-HxCDD	1.012	1.000-1.019
1,2,3,4,7,8-HxCDF	13C-1,2,3,4,7,8-HxCDF	1.001	0.999-1.001
1,2,3,6,7,8-HxCDF	13C-1,2,3,6,7,8-HxCDF	1.001	0.997-1.005
2,3,4,6,7,8-HxCDF	13C-2,3,4,6,7,8-HxCDF	1.000	0.999-1.001
1,2,3,7,8,9-HxCDF	13C-1,2,3,7,8,9-HxCDF	1.001	0.999-1.001
1,2,3,4,6,7,8-HpCDD	13C-1,2,3,4,6,7,8-HpCDD	1.000	0.999-1.001
1,2,3,4,6,7,8-HpCDF	13C-1,2,3,4,6,7,8-HpCDF	1.001	0.999-1.001
1,2,3,4,7,8,9-HpCDF	13C-1,2,3,4,7,8,9-HpCDF	1.001	0.999-1.001
OCDD	13C-OCDD	1.001	0.999-1.001
OCDF	13C-OCDF	1.001	0.999-1.001
LABELED COMPOUNDS			
13C-1,2,3,4,7,8-HxCDD	13C-1,2,3,7,8,9-HxCDD	0.984	0.977-1.000
13C-1,2,3,6,7,8-HxCDD		0.988	0.981-1.003
13C-1,2,3,4,7,8-HxCDF		0.949	0.944-0.970
13C-1,2,3,6,7,8-HxCDF		0.954	0.949-0.975
13C-2,3,4,6,7,8-HxCDF		0.978	0.959-1.021
13C-1,2,3,7,8,9-HxCDF		1.015	0.977-1.047
13C-1,2,3,4,6,7,8-HpCDD		1.128	1.086-1.130
13C-1,2,3,4,6,7,8-HpCDF		1.079	1.043-1.085
13C-1,2,3,4,7,8,9-HpCDF		1.151	1.057-1.154
13C-OCDD		1.269	1.032-1.311
13C-OCDF		1.278	1.000-1.311

(1) Contract-required limits for Relative Retention Times (RRT) as specified in Table 2, Method 1613.

Analyst: [signature] Date: 7/28/06

FAL ID: ST072706M2 Filename: 27JUL06M Sam:8 Acquired: 27-JUL-06 17:01:01 ICal: PCDDFAL3-7-5-06
Client ID: 1613 CS3 (051212J) ConCal: ST072706M2 EndCal: ST072706M3
Results: GC Column: DB5 Amount: 1.000 NATO 1989 Tox: 94.1
WHO 1998 Tox: 117

Name	Resp	RA	RT	RRF	Conc	Qual	Fac	Noise	DL	
2,3,7,8-TCDD	1.36e+07	0.76 y	27:18	1.10	8.71		2.50	-	*	
1,2,3,7,8-PeCDD	5.32e+07	1.56 y	33:07	0.90	46.3		2.50	-	*	
1,2,3,4,7,8-HxCDD	4.15e+07	1.27 y	38:28	0.96	47.3		2.50	-	*	
1,2,3,6,7,8-HxCDD	4.52e+07	1.22 y	38:38	0.83	47.7		2.50	-	*	
1,2,3,7,8,9-HxCDD	4.06e+07	1.21 y	39:05	0.77	51.0		2.50	-	*	
1,2,3,4,6,7,8-HpCDD	4.48e+07	1.06 y	44:04	0.86	48.6		2.50	-	*	
OCDD	7.05e+07	0.87 y	49:35	0.87	101		2.50	-	*	
2,3,7,8-TCDF	1.45e+07	0.78 y	26:33	0.99	8.56		2.50	-	*	
1,2,3,7,8-PeCDF	6.56e+07	1.56 y	31:23	0.80	46.4		2.50	-	*	
2,3,4,7,8-PeCDF	6.71e+07	1.56 y	32:42	0.88	46.0		2.50	-	*	
1,2,3,4,7,8-HxCDF	5.47e+07	1.25 y	37:05	1.42	49.5		2.50	-	*	
1,2,3,6,7,8-HxCDF	5.43e+07	1.22 y	37:17	0.97	48.7		2.50	-	*	
2,3,4,6,7,8-HxCDF	5.18e+07	1.24 y	38:13	1.26	48.4		2.50	-	*	
1,2,3,7,8,9-HxCDF	6.28e+07	1.27 y	39:39	1.34	50.6		2.50	-	*	
1,2,3,4,6,7,8-HpCDF	5.55e+07	1.05 y	42:11	1.28	50.6		2.50	-	*	
1,2,3,4,7,8,9-HpCDF	4.60e+07	1.03 y	44:59	1.22	50.4		2.50	-	*	
OCDF	7.99e+07	0.90 y	49:57	0.90	101		2.50	-	*	
										Rec
13C-2,3,7,8-TCDD	1.42e+08	0.78 y	27:17	1.00	101					101
13C-1,2,3,7,8-PeCDD	1.27e+08	1.56 y	33:05	0.96	94.2					94.2
13C-1,2,3,4,7,8-HxCDD	9.16e+07	1.27 y	38:27	0.90	90.9					90.9
13C-1,2,3,6,7,8-HxCDD	1.14e+08	1.27 y	38:37	1.09	94.4					94.4
13C-1,2,3,4,6,7,8-HpCDD	1.07e+08	1.04 y	44:03	0.96	100					100
13C-OCDD	1.60e+08	0.87 y	49:34	0.71	201					101
13C-2,3,7,8-TCDF	1.71e+08	0.78 y	26:32	0.94	102					102
13C-1,2,3,7,8-PeCDF	1.77e+08	1.55 y	31:22	1.00	98.7					98.7
13C-2,3,4,7,8-PeCDF	1.67e+08	1.58 y	32:41	0.94	98.5					98.5
13C-1,2,3,4,7,8-HxCDF	7.76e+07	0.52 y	37:04	0.86	81.0					81.0
13C-1,2,3,6,7,8-HxCDF	1.15e+08	0.52 y	37:15	1.23	84.1					84.1
13C-2,3,4,6,7,8-HxCDF	8.48e+07	0.51 y	38:13	0.88	86.2					86.2
13C-1,2,3,7,8,9-HxCDF	9.27e+07	0.52 y	39:38	0.98	84.8					84.8
13C-1,2,3,4,6,7,8-HpCDF	8.55e+07	0.44 y	42:09	0.86	89.0					89.0
13C-1,2,3,4,7,8,9-HpCDF	7.49e+07	0.44 y	44:57	0.70	96.2					96.2
13C-OCDF	1.76e+08	0.88 y	49:56	0.82	193					96.3
37Cl-2,3,7,8-TCDD	9.64e+06		27:18	0.81	8.44					84.4
13C-1,2,3,4-TCDD	1.41e+08	0.79 y	26:42	-	73.8					
13C-1,2,3,4-TCDF	1.79e+08	0.77 y	25:27	-	62.3					
13C-1,2,3,7,8,9-HxCDD	1.11e+08	1.27 y	39:04	-	74.6					
							Fac	Noise	DL	#Hom
Total Tetra-Dioxins	5.68e+07		24:02	1.10	36.4		2.50	-	*	22
Total Penta-Dioxins	1.45e+08		30:09	0.90	126		2.50	-	*	17
Total Hexa-Dioxins	1.77e+08		36:01	0.85	203		2.50	-	*	19
Total Hepta-Dioxins	8.69e+07		41:36	0.86	94.3		2.50	-	*	32
Total Tetra-Furans	5.68e+07		22:57	0.99	33.5		2.50	-	*	29
1st Fn. Tot Penta-Furans	7.92e+07		28:19	0.84	55.2		2.50	-	*	1 PeCDF
Total Penta-Furans	1.84e+08		30:05	0.84	128		2.50	-	*	19 183
Total Hexa-Furans	2.79e+08		35:08	1.22	246		2.50	-	*	27
Total Hepta-Furans	1.04e+08		42:11	1.25	103		2.50	-	*	20

Analyst: _____ Date: 7/27/06

Frontier Analytical Laboratory - Acquisition Log

Run Name:27JUL06M Instrument: FAL3 GC: DB5 Experiment:PCDD

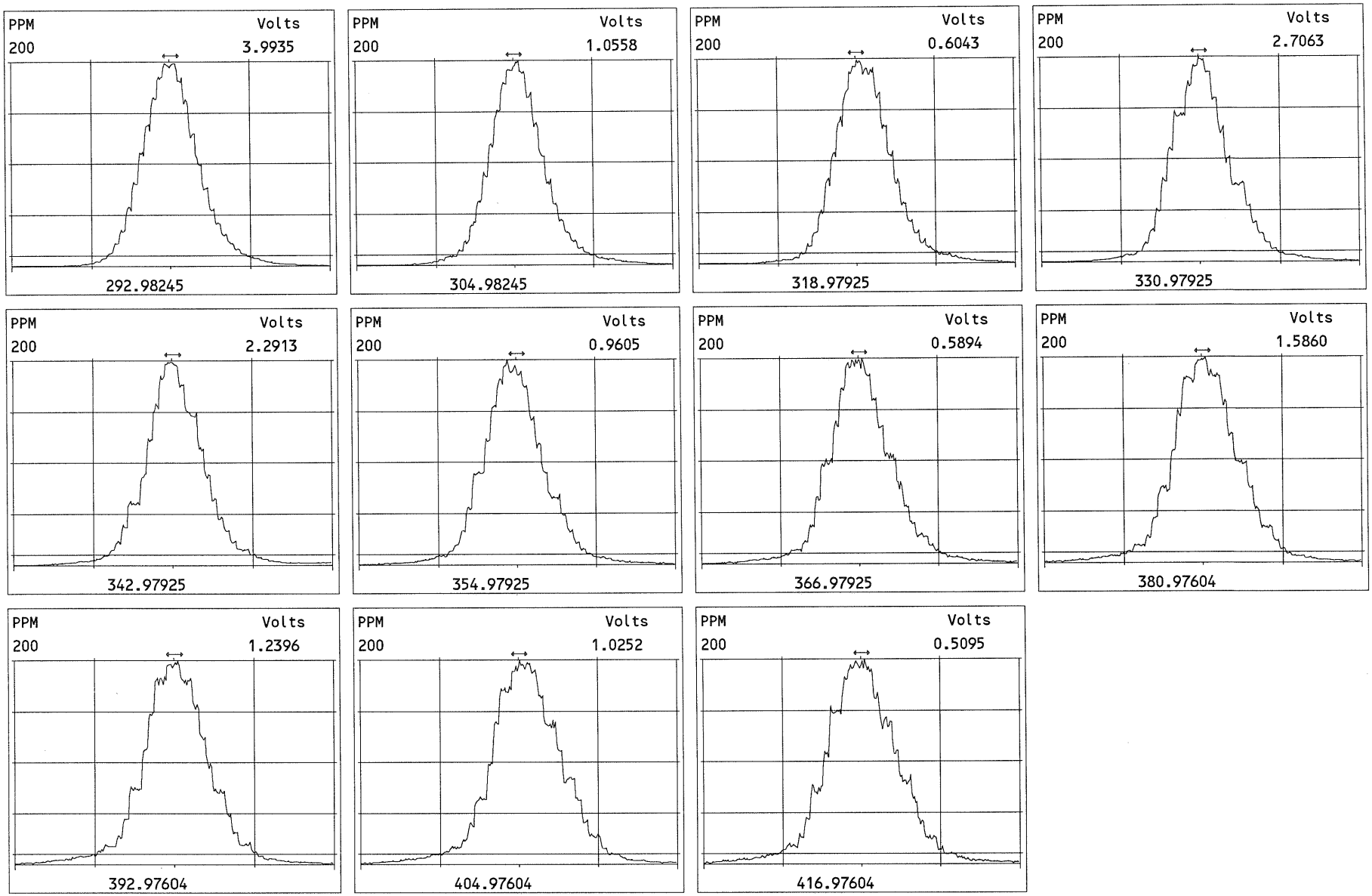
Data File	S	FAL ID	Client ID	Acquired	ConCal	EndCal	Analyst
27JUL06M	1	ST072706M1	1613 CS3 (051212J)	27-JUL-06 10:33:29	ST072706M1	ST072706M2	TC
27JUL06M	2	3956-001-0001-SA	IG7-S1	27-JUL-06 11:28:52	ST072706M1	ST072706M2	TC
27JUL06M	3	3963-001-0001-SA	061409-08	27-JUL-06 12:24:11	ST072706M1	ST072706M2	TC
27JUL06M	4	3963-002-0001-SA	061409-09	27-JUL-06 13:19:31	ST072706M1	ST072706M2	TC
27JUL06M	5	3963-003-0001-SA	061409-10	27-JUL-06 14:14:54	ST072706M1	ST072706M2	TC
27JUL06M	6	3967-001-0001-SA	C-4, S-1	27-JUL-06 15:10:18	ST072706M1	ST072706M2	TC
27JUL06M	7	SB072706M1	Solvent Blank	27-JUL-06 16:05:42	ST072706M1	ST072706M2	TC
27JUL06M	8	ST072706M2	1613 CS3 (051212J)	27-JUL-06 17:01:01	ST072706M2	ST072706M3	TC

18 7/28/06

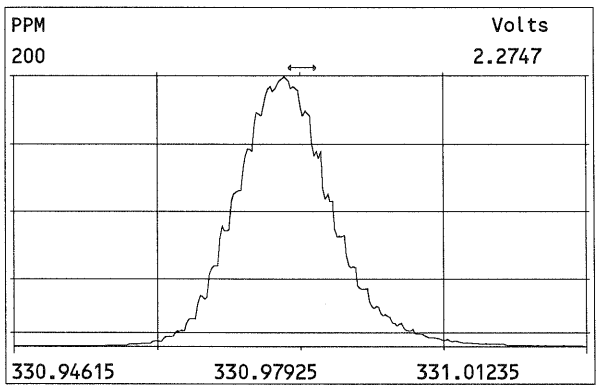
Data Backed Up:_____

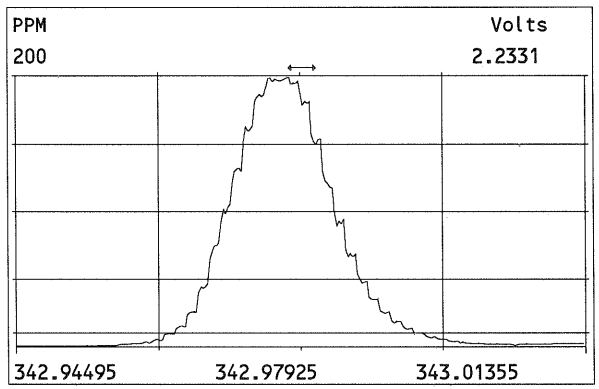
Date:_____

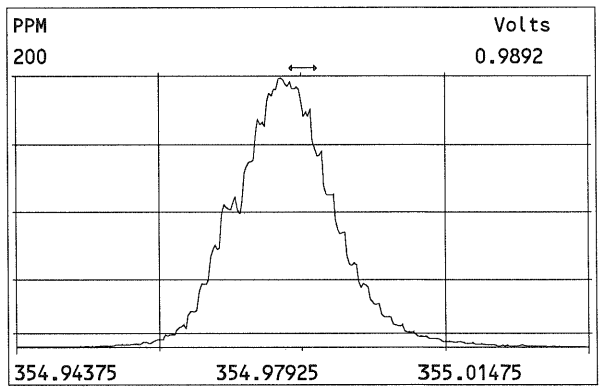
Peak Locate Examination:27-JUL-2006:10:31 File:27JUL06M
Experiment:PCDD Function:1 Reference:PFK

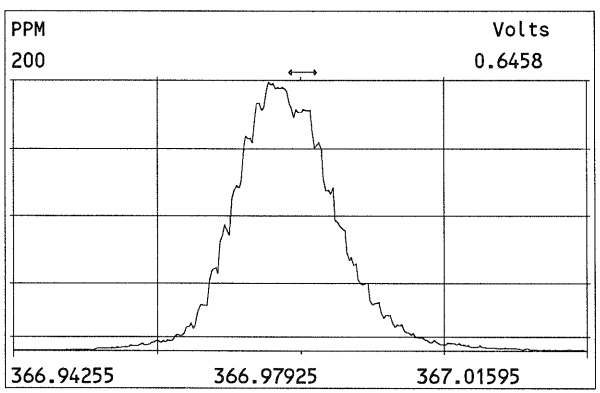


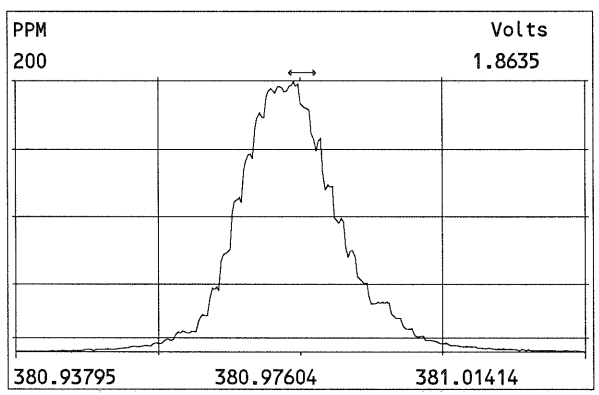
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:2 Reference:PFK

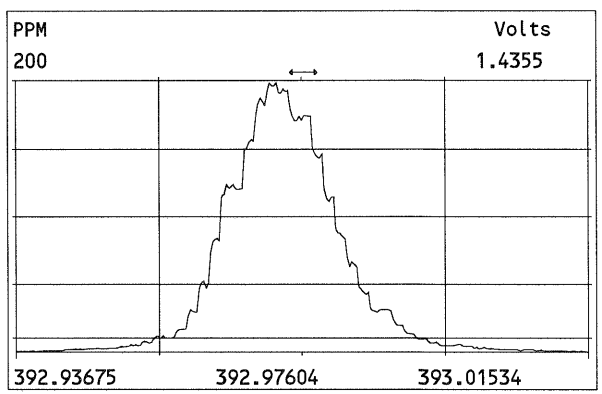


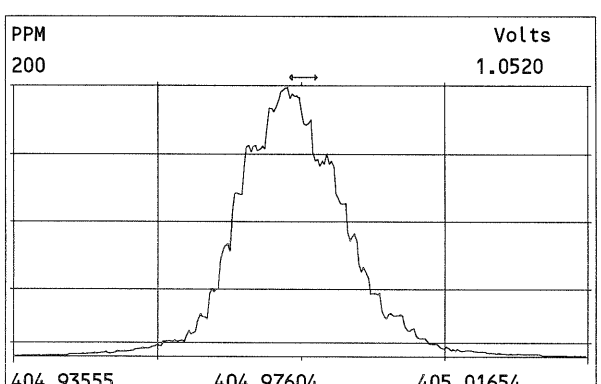


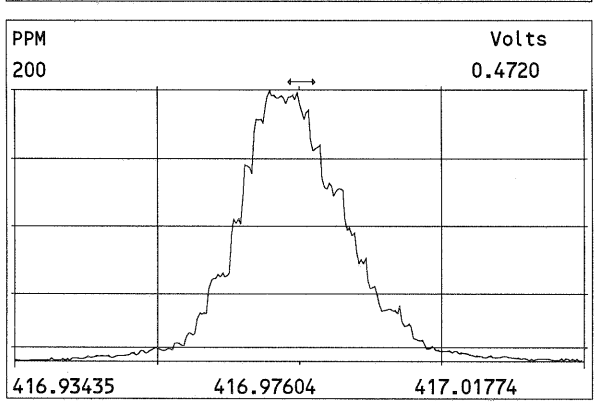




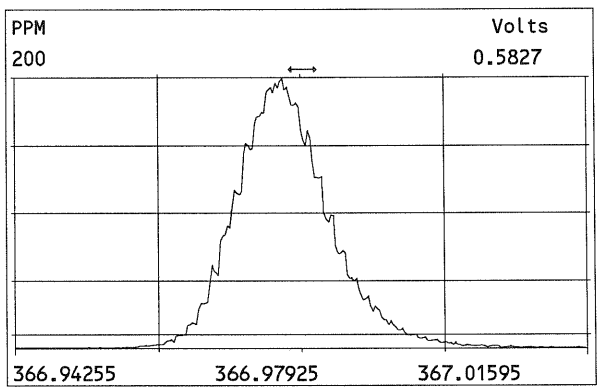


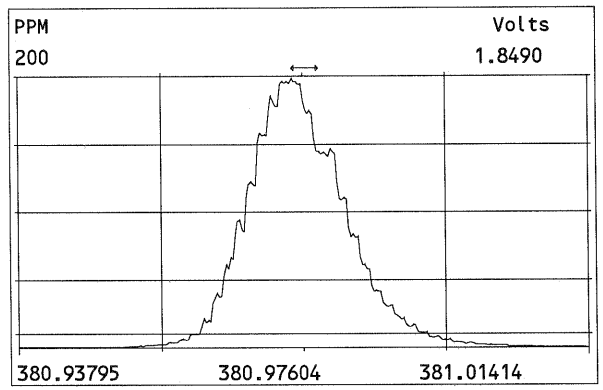


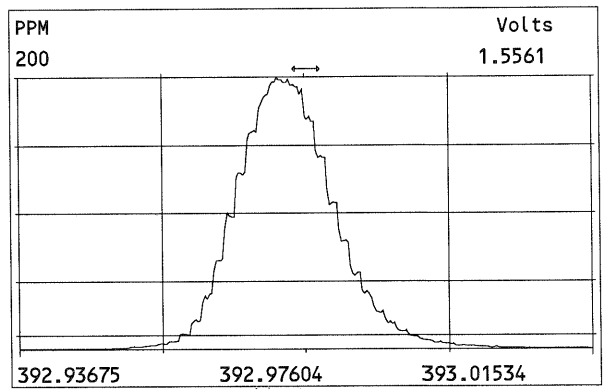


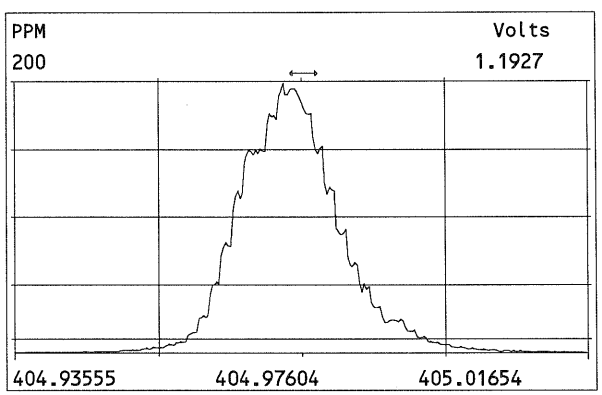


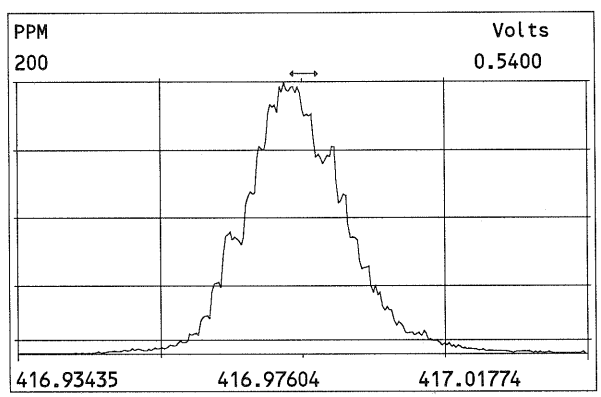
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:3 Reference:PFK

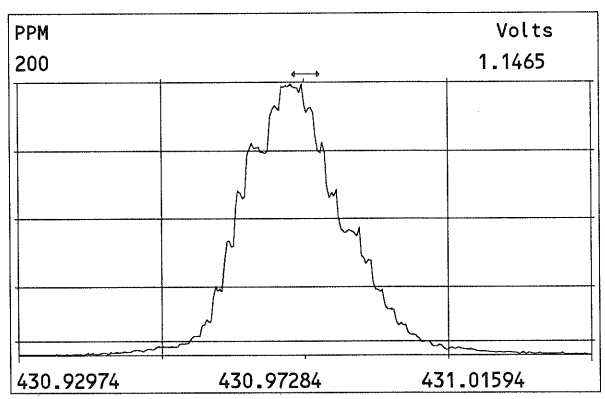


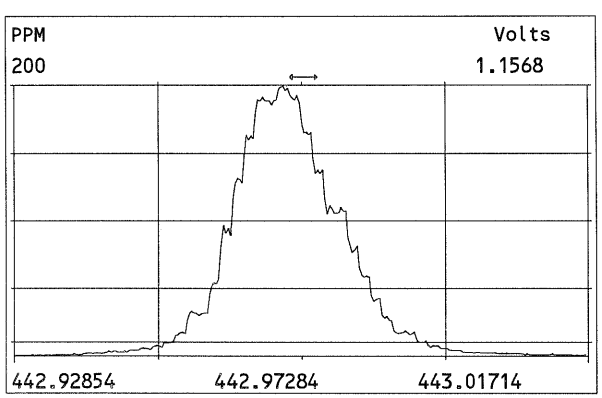


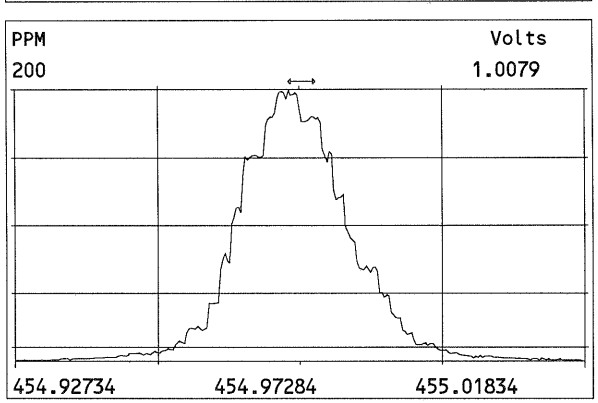




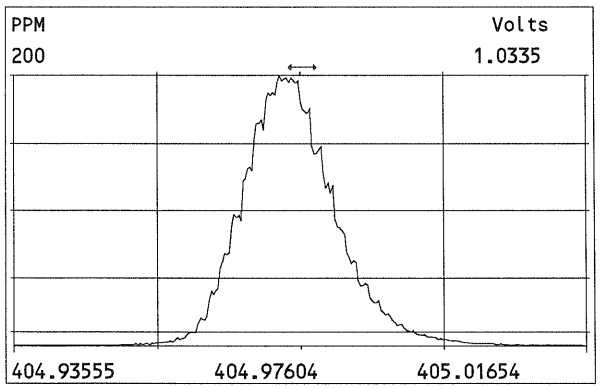


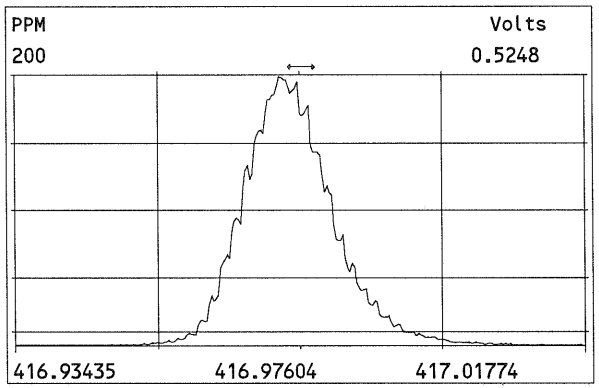


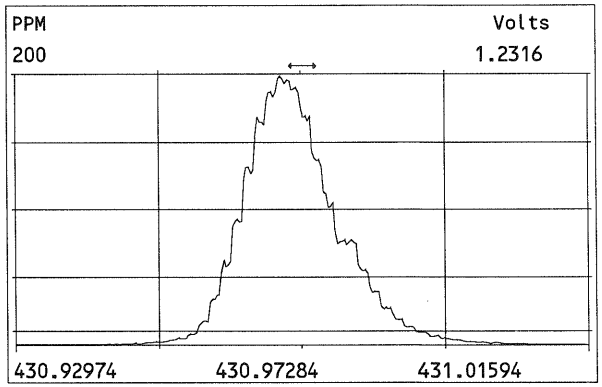


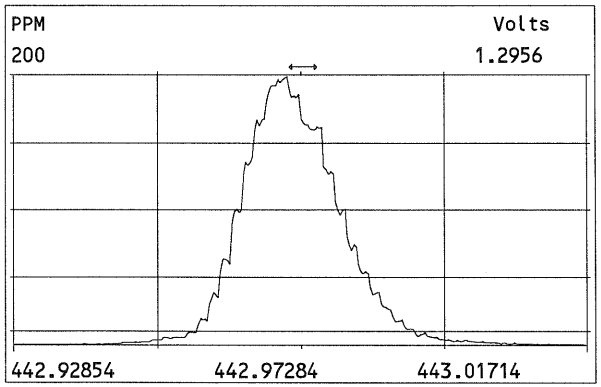


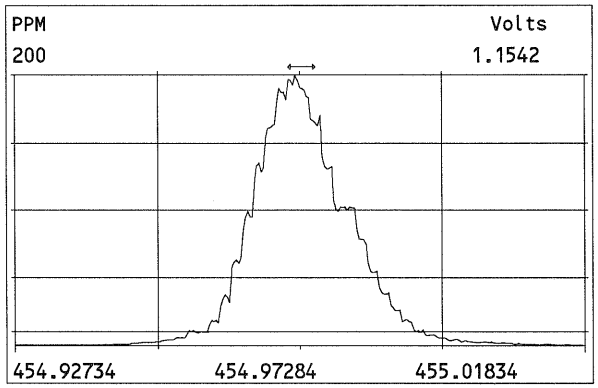
Peak Locate Examination:27-JUL-2006:10:32 File:27JUL06M
Experiment:PCDD Function:4 Reference:PFK

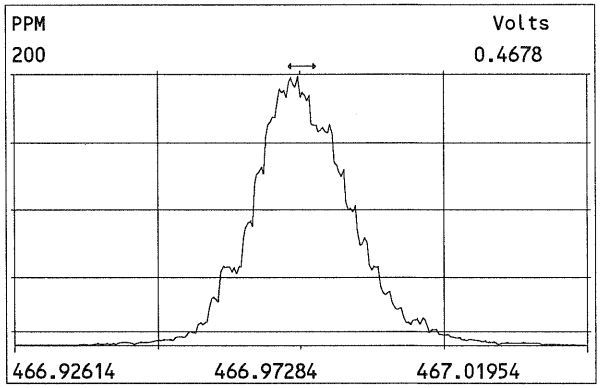


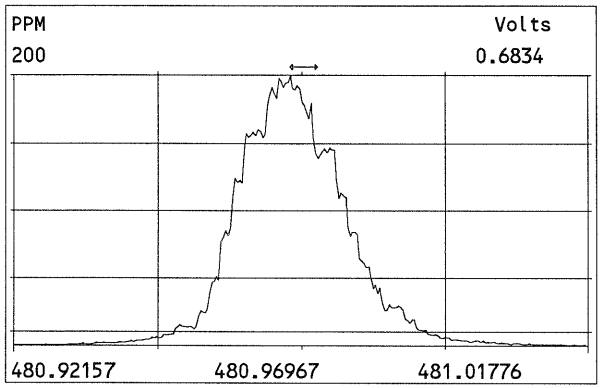




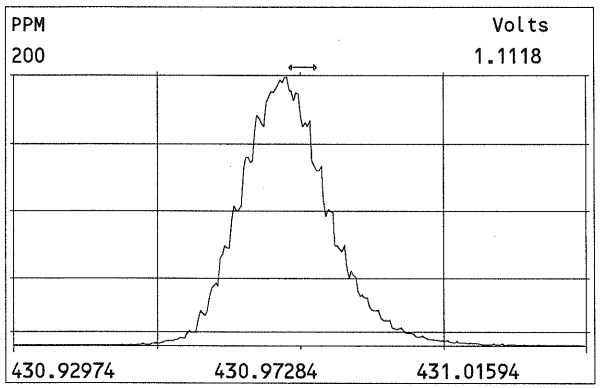


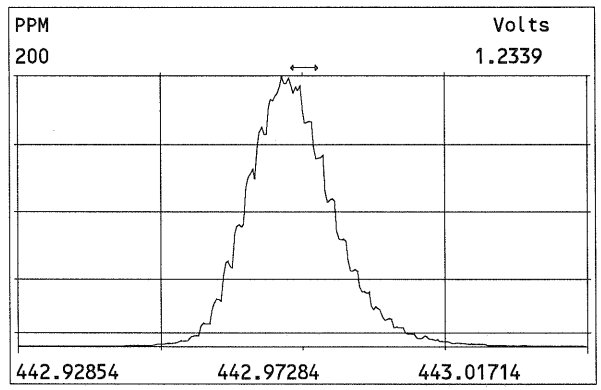


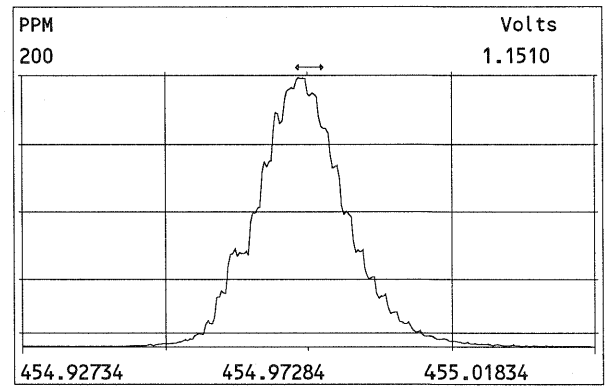


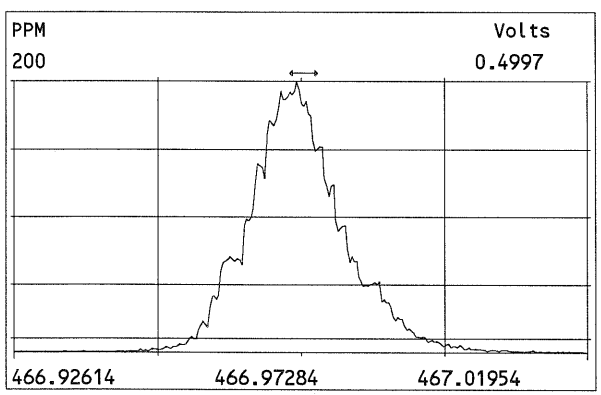


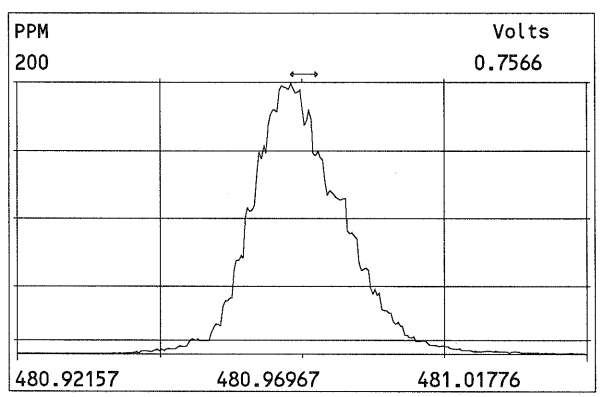
Peak Locate Examination:27-JUL-2006:10:33 File:27JUL06M
Experiment:PCDD Function:5 Reference:PFK

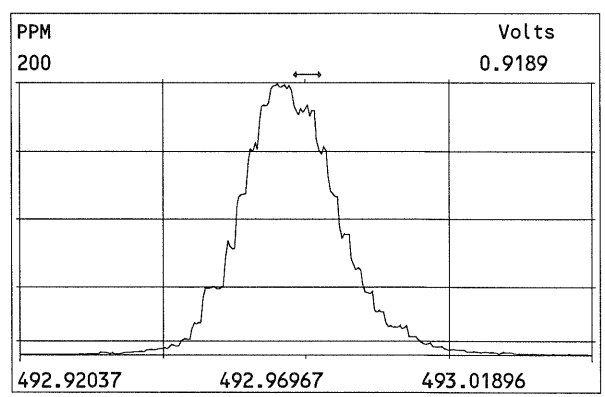


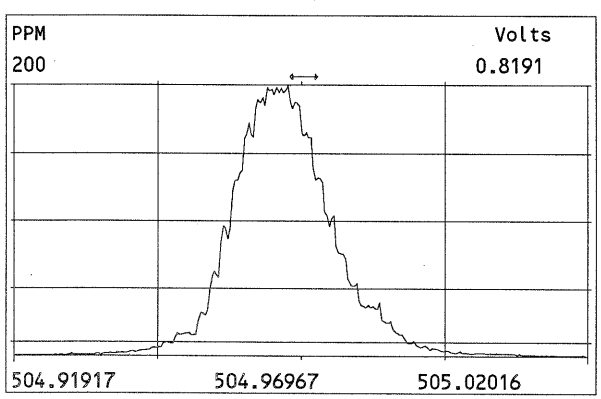


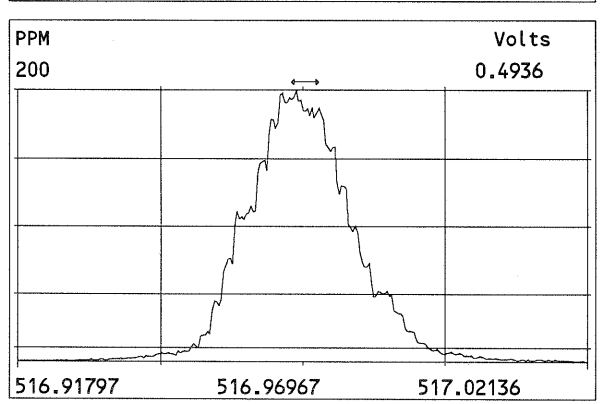




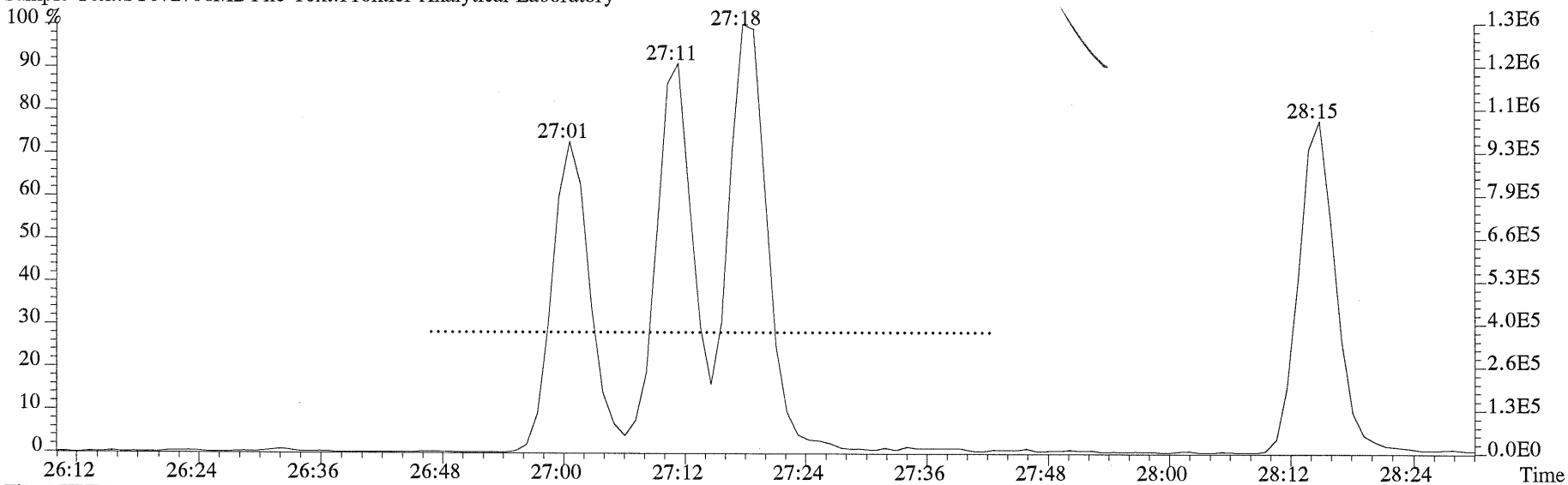




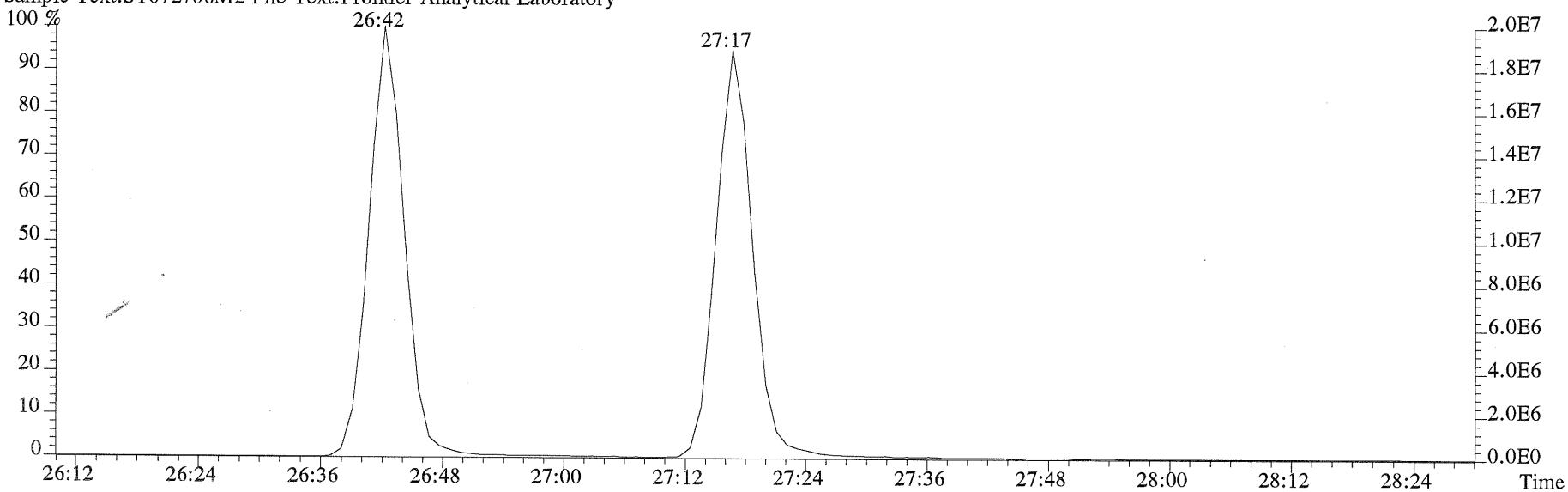




File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:8 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

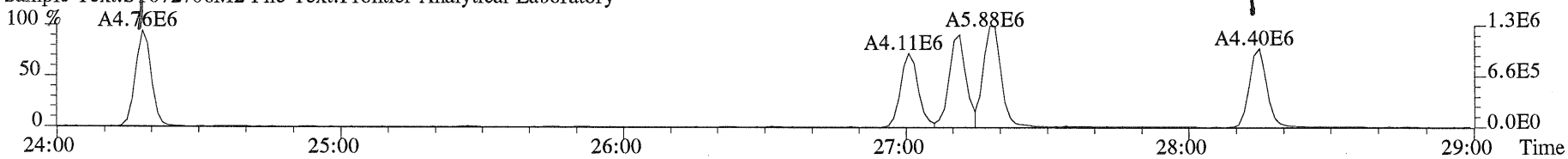


File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:8 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

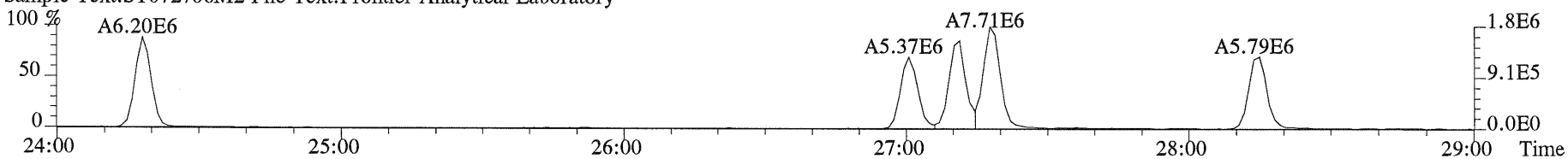


768

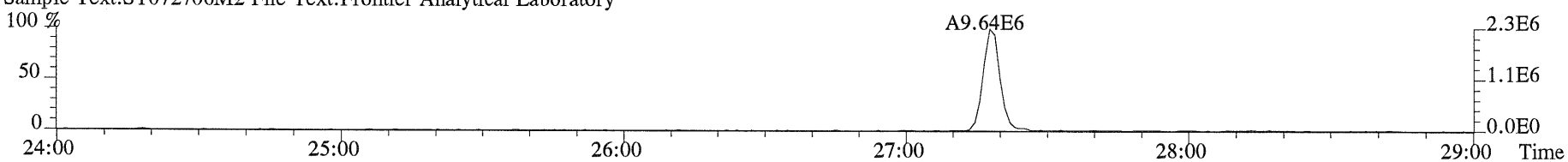
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
319.8965 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



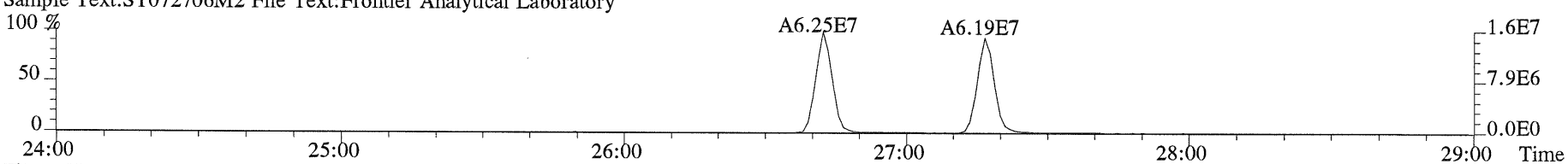
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
321.8936 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



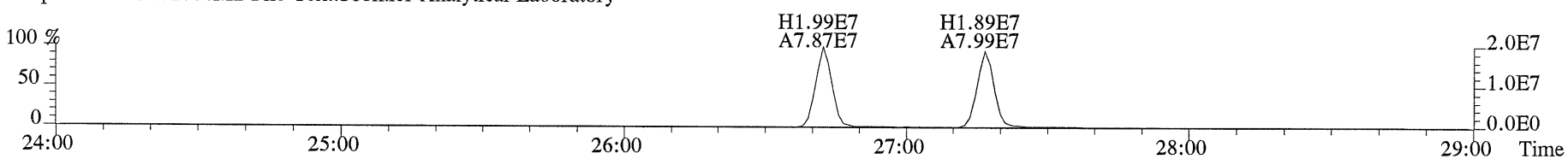
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
327.8847 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
331.9368 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

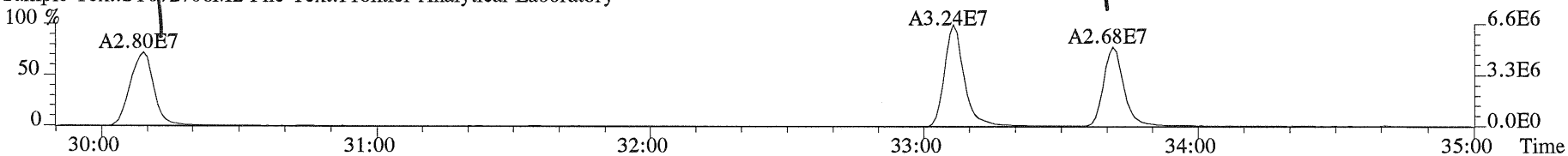


File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
333.9339 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

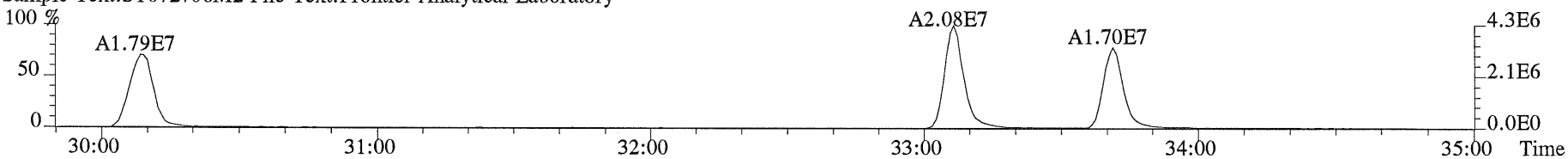


Klamath River Sediment Study

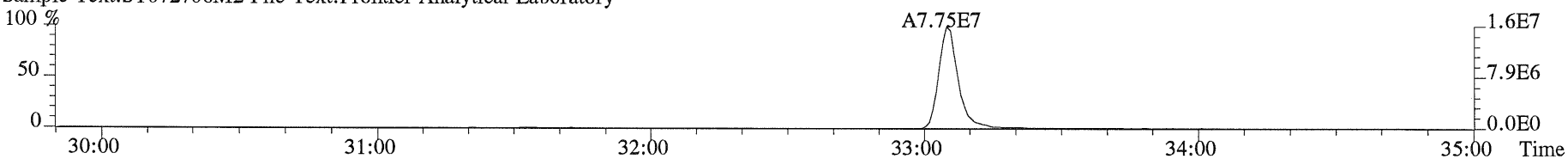
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
355.8546 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



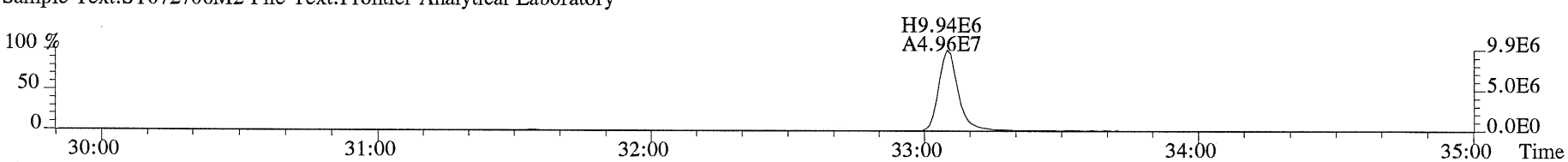
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
357.8517 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



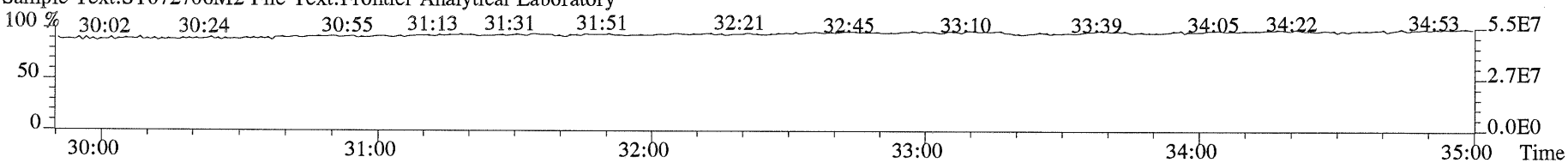
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
367.8949 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
369.8919 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



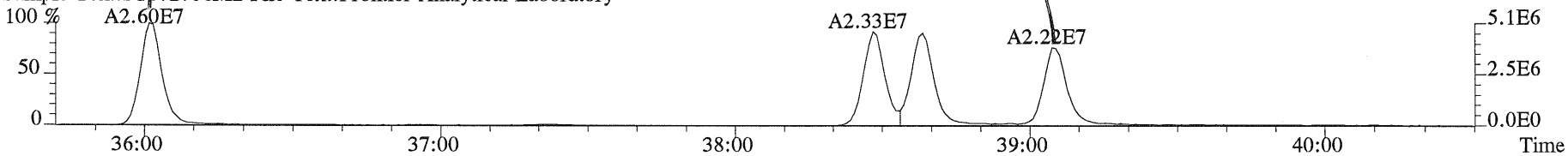
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
366.9792 S:8 F:2 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



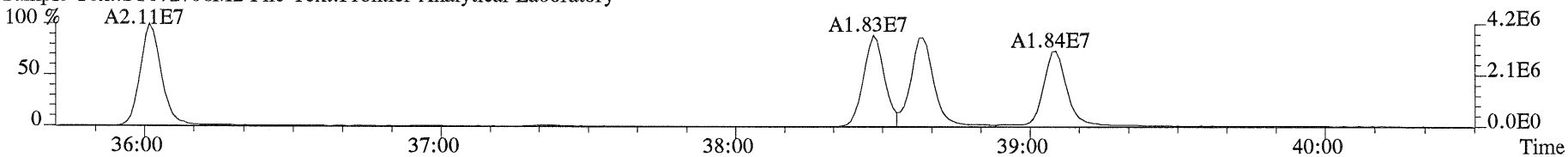
769

Klamath River Sediment Study

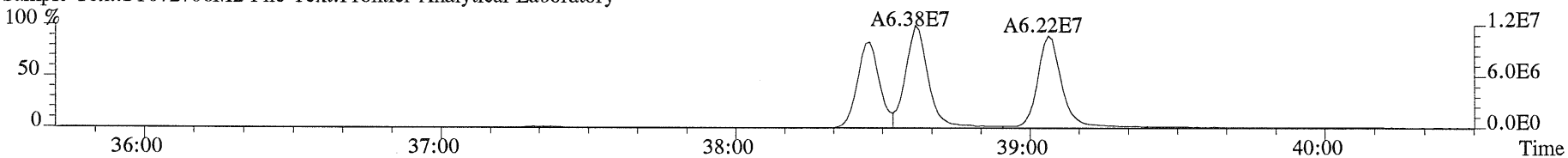
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
389.8156 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



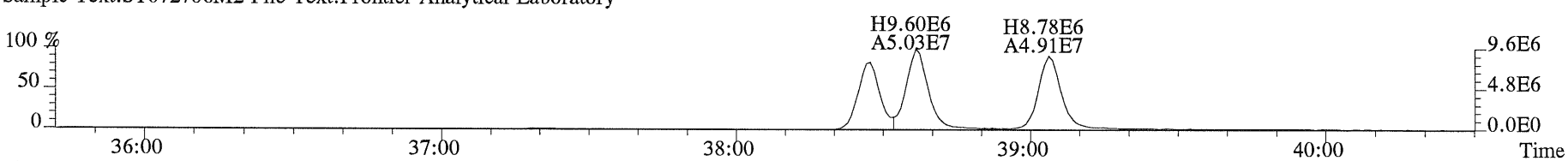
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
391.8127 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



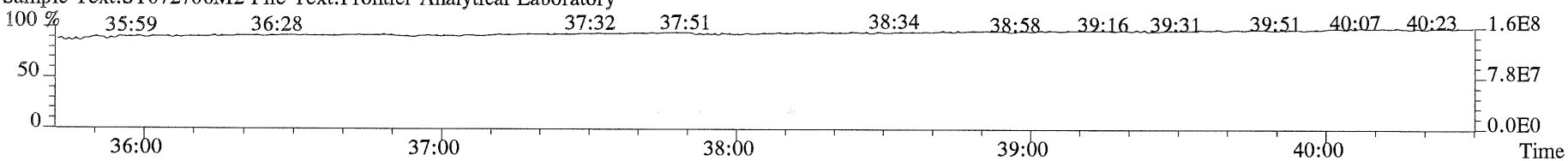
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
401.8559 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



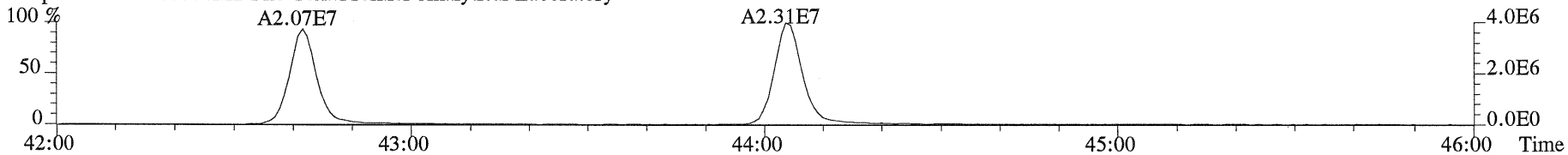
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
403.8530 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



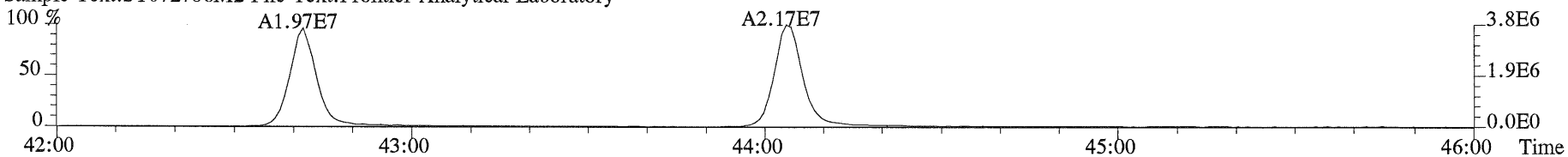
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
380.9760 S:8 F:3 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



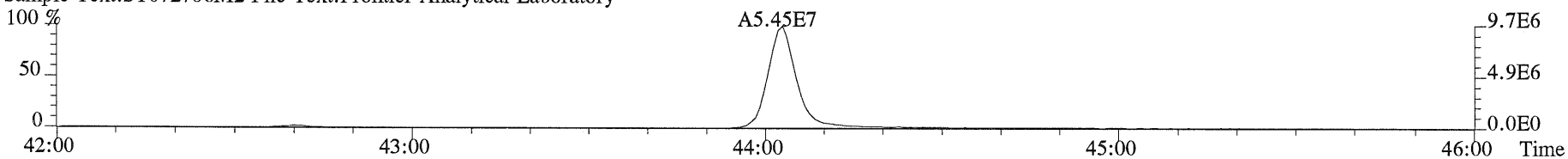
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
423.7767 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



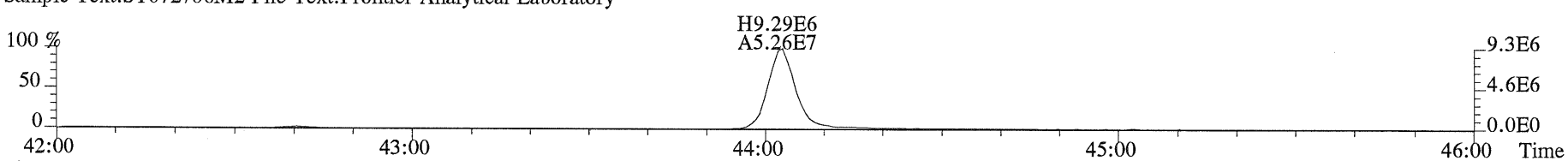
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
425.7737 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



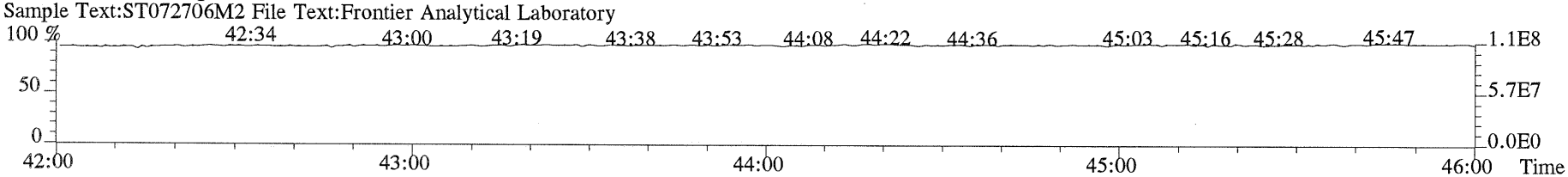
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
435.8169 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



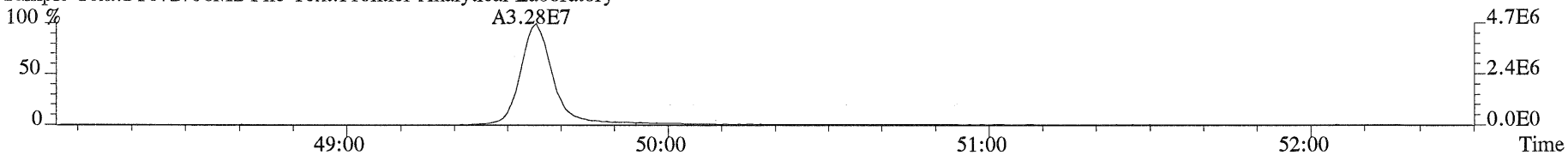
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
437.8140 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



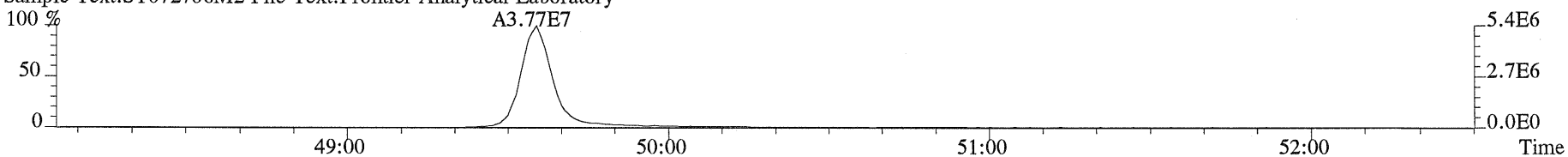
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
430.9728 S:8 F:4 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



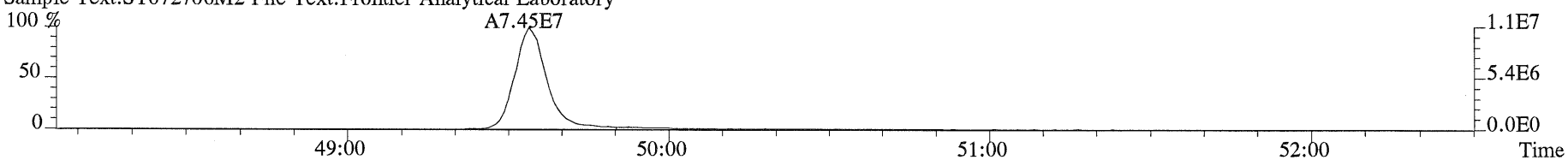
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
457.7377 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



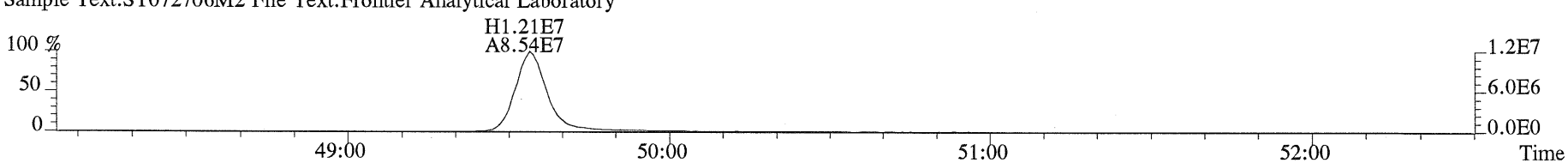
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
459.7348 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



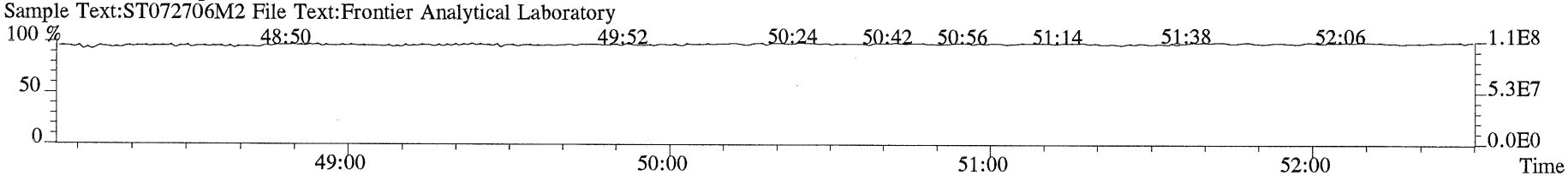
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
469.7780 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
471.7750 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

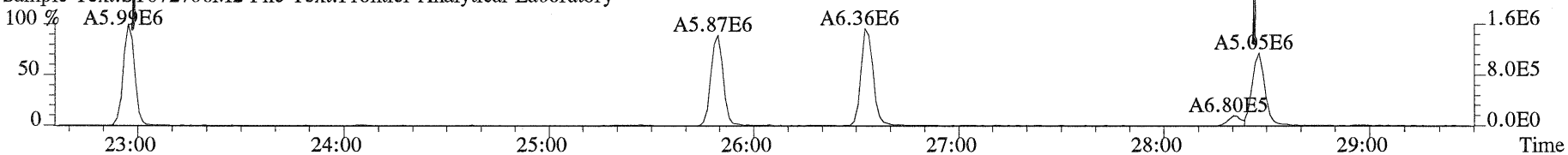


File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
454.9728 S:8 F:5 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

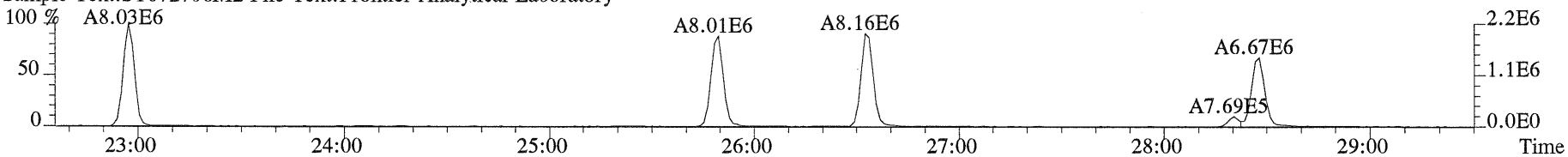


773

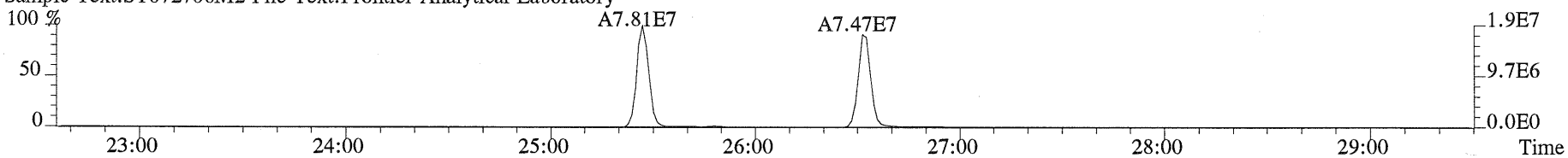
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
303.9016 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



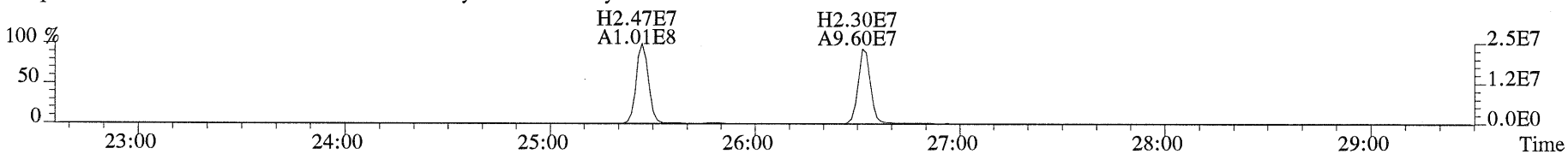
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
305.8987 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



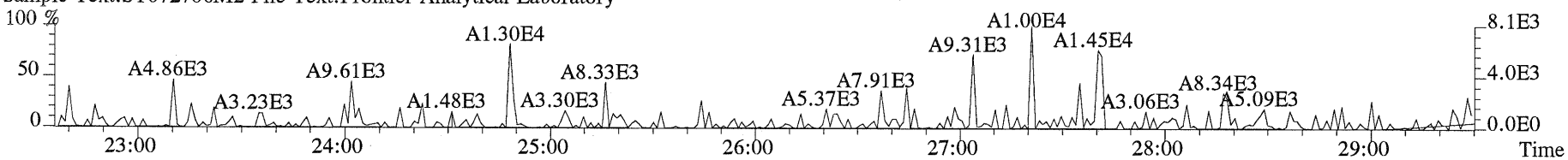
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
315.9419 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
317.9389 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
375.8364 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



Klamath River Sediment Study

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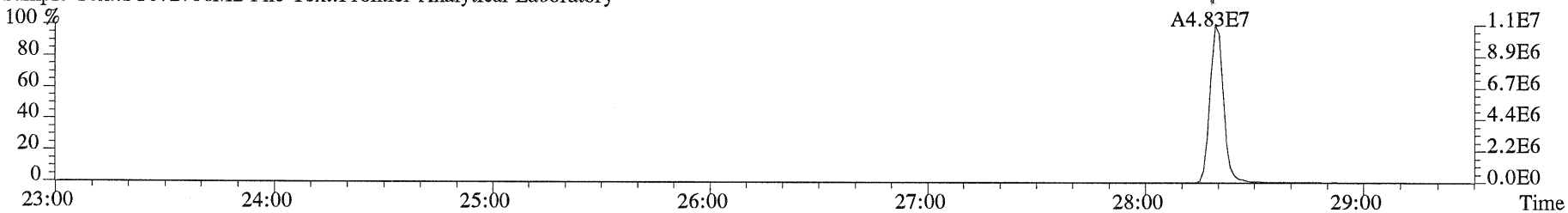
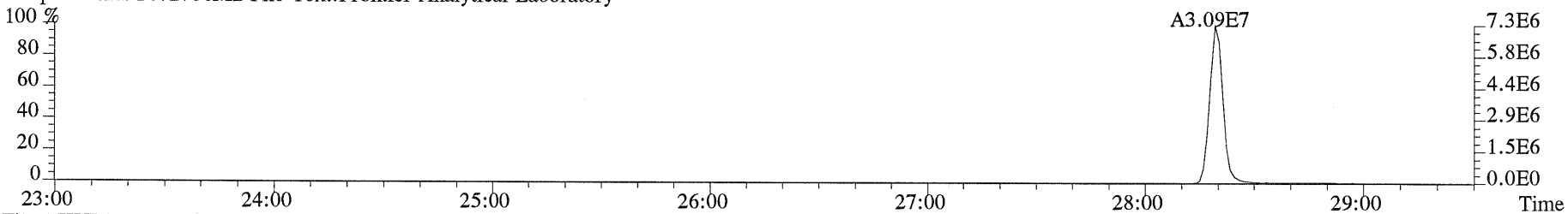
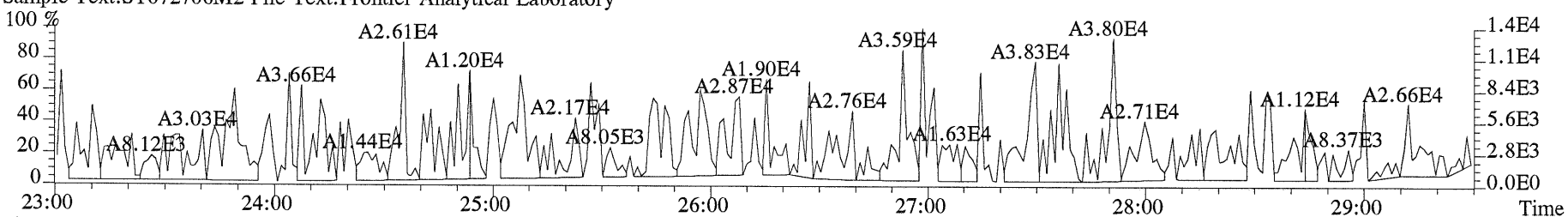
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



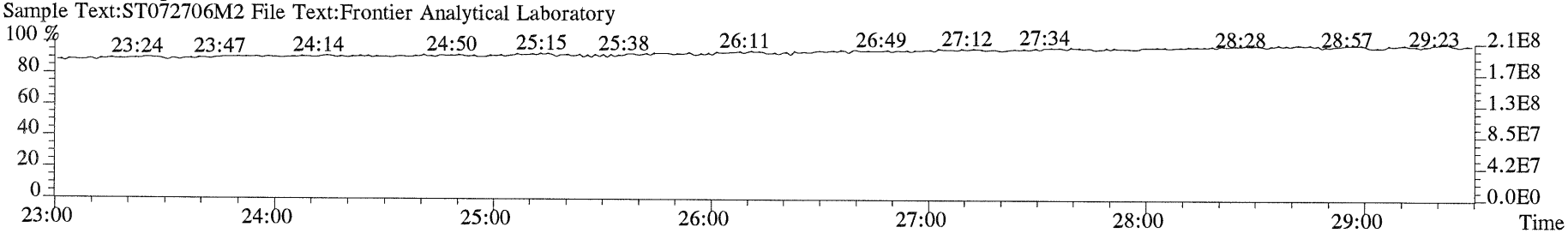
File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

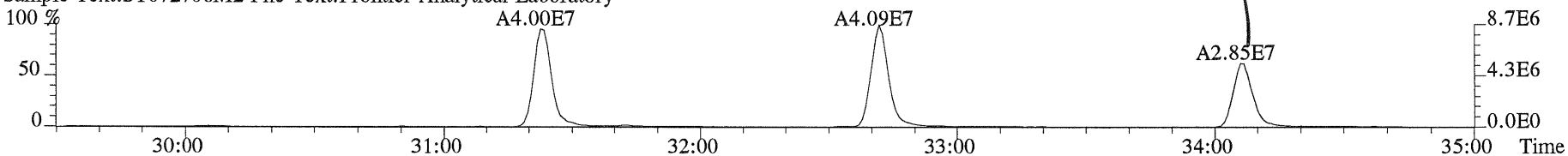


File:27JUL06M #1-390 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
330.9792 S:8 Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

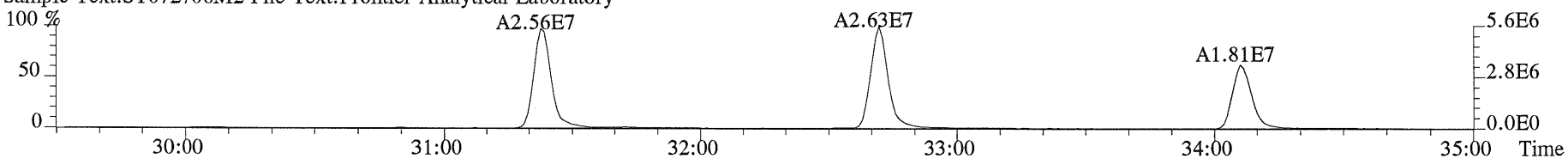


Klamath River Sediment Study

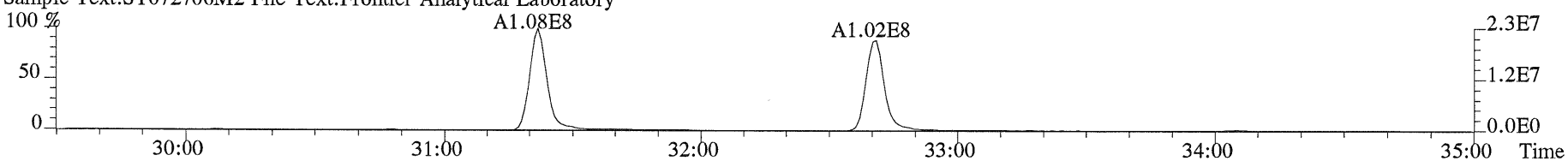
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
339.8597 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



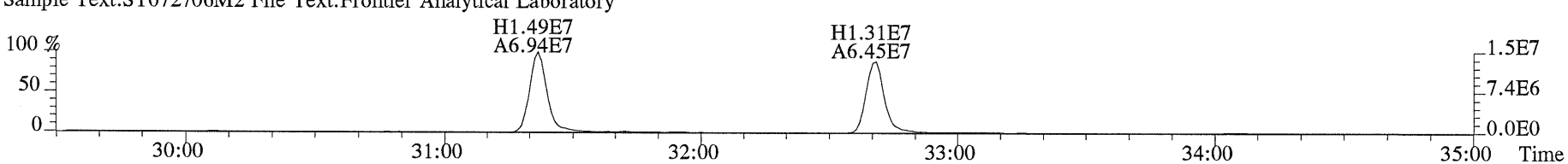
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
341.8568 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



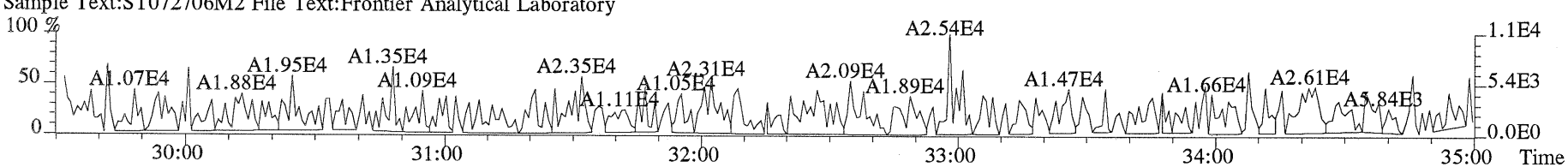
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
351.9000 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



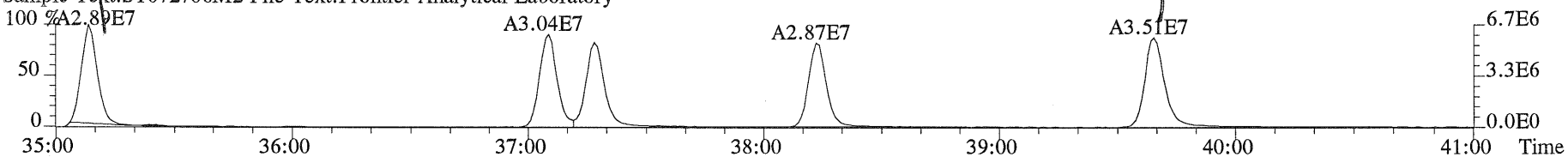
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
353.8970 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



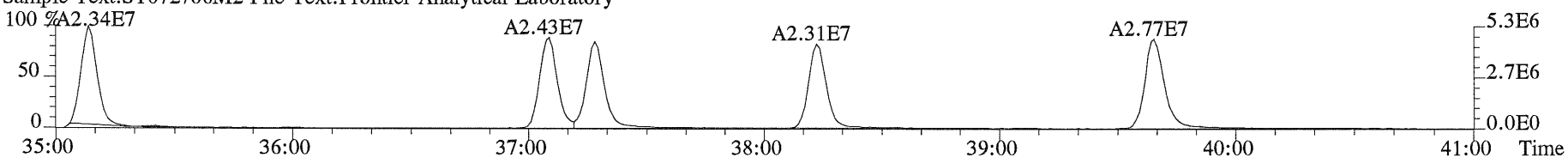
File:27JUL06M #1-425 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
409.7974 S:8 F:2 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



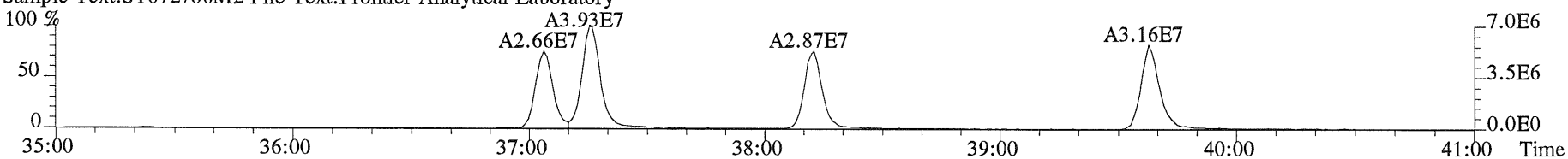
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
373.8207 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



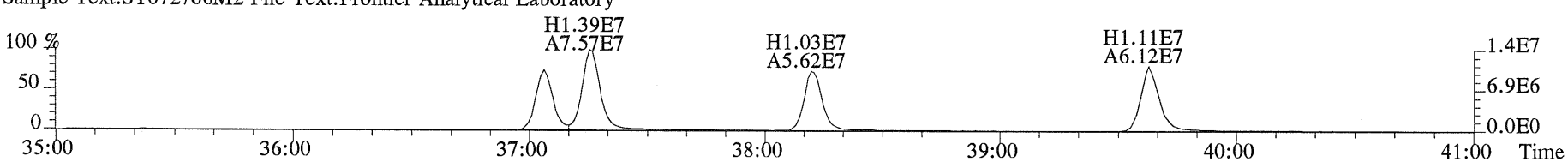
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
375.8178 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



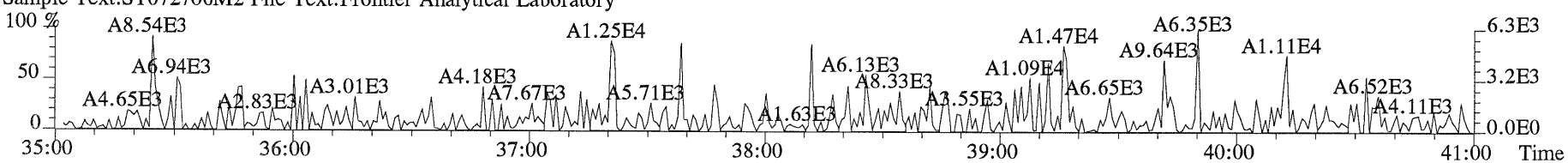
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
383.8639 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



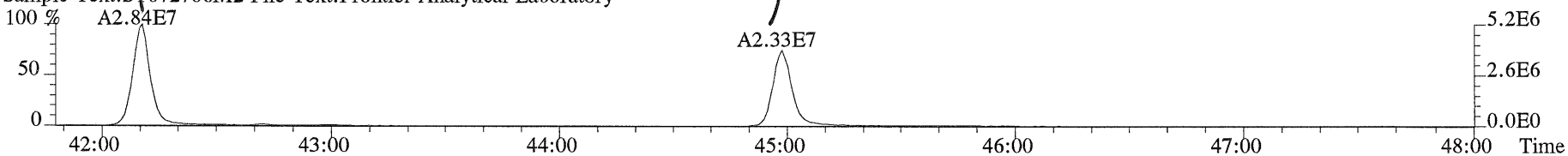
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
385.8610 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



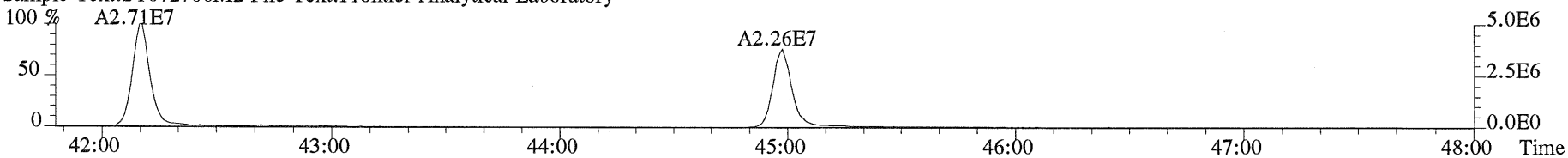
File:27JUL06M #1-464 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
445.7555 S:8 F:3 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



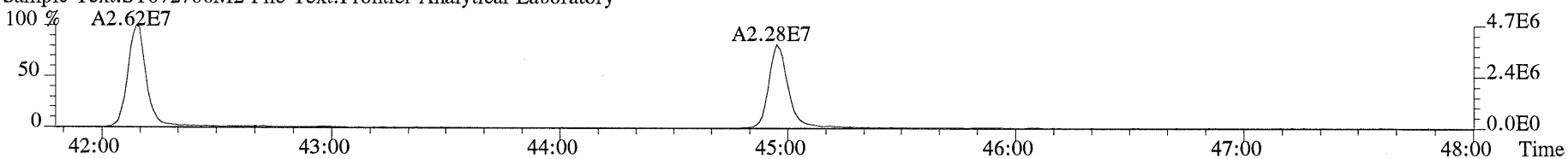
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
407.7818 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



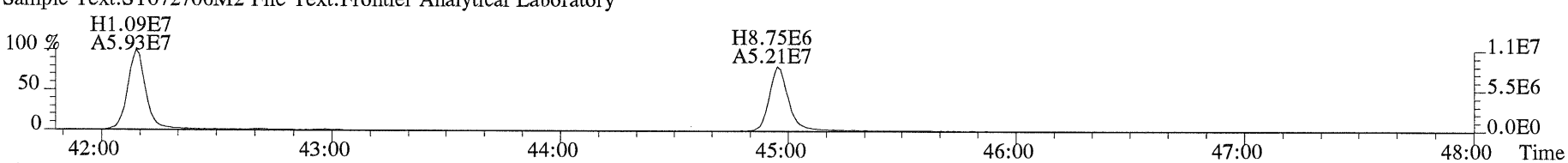
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
409.7788 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



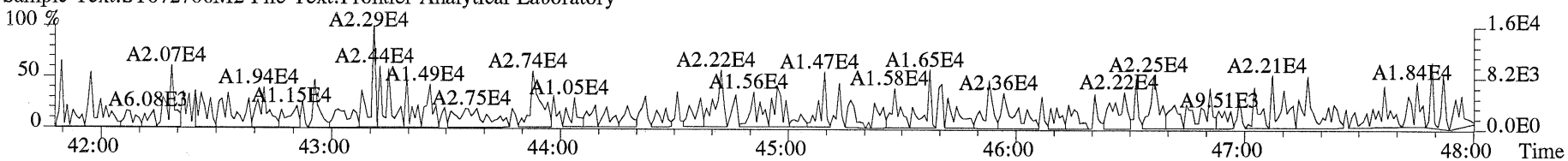
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
417.8253 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



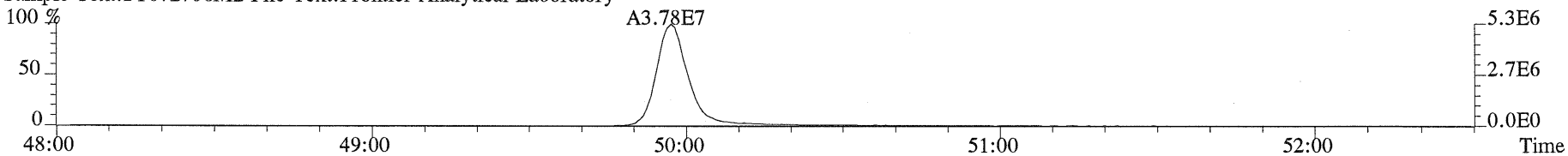
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
419.8220 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



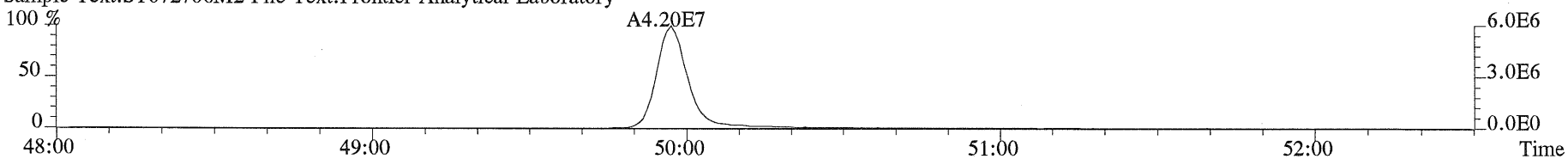
File:27JUL06M #1-541 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
479.7165 S:8 F:4 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



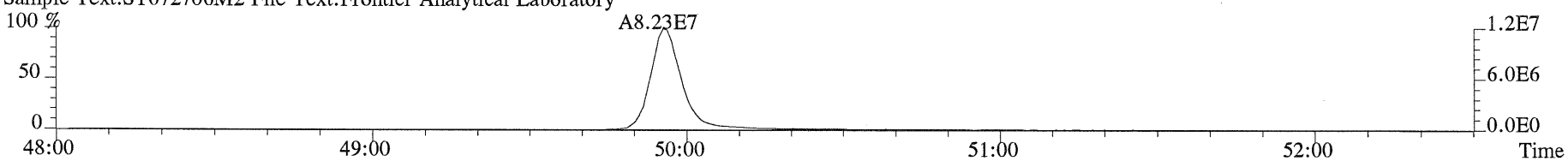
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
441.7428 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



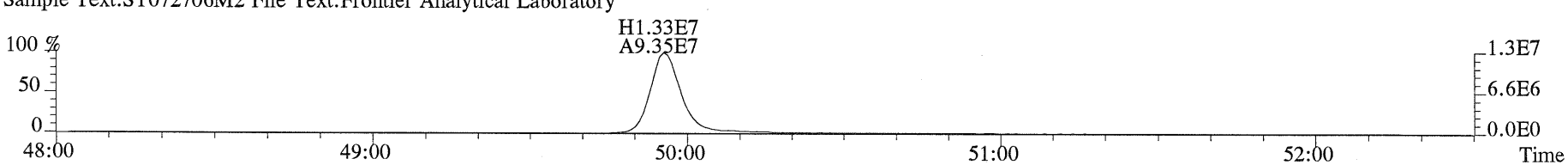
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
443.7398 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



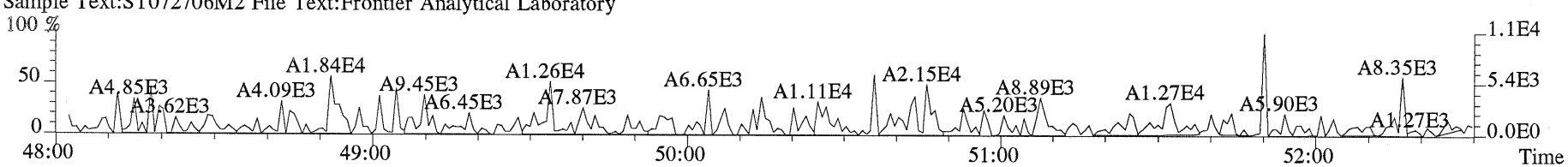
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
453.7831 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory



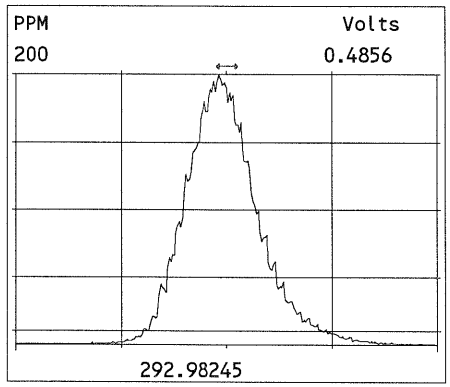
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
455.7801 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

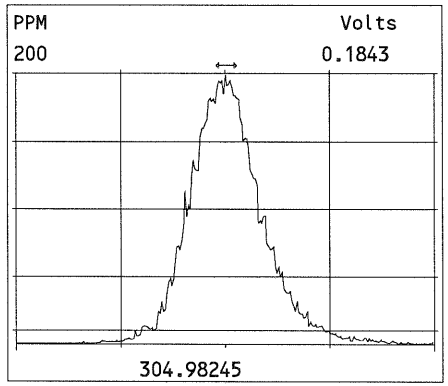


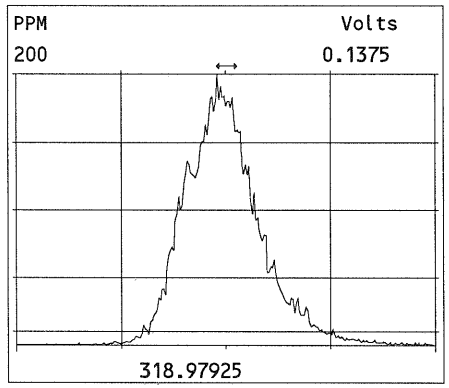
File:27JUL06M #1-347 Acq:27-JUL-2006 17:01:01 GC EI+ Voltage SIR Autospec-Ultima
513.6775 S:8 F:5 BSUB(10000,15,-3.0) PKD(5,5,3,0.10%,100.0,0.00%,F,F) Exp:PCDD
Sample Text:ST072706M2 File Text:Frontier Analytical Laboratory

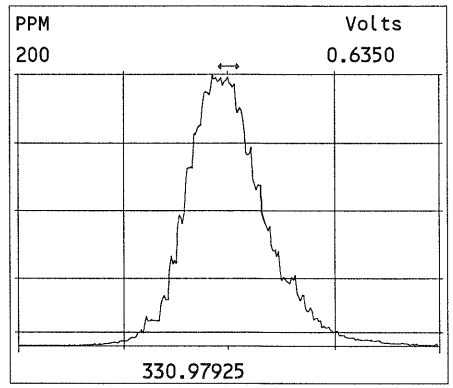


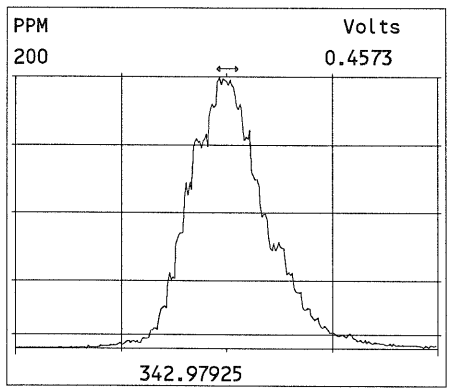
Peak Locate Examination:28-JUL-2006:03:12 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:1 Reference:PFK

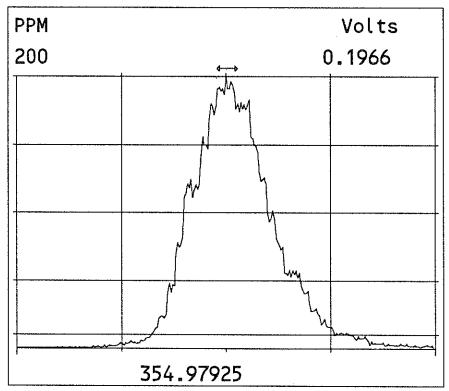


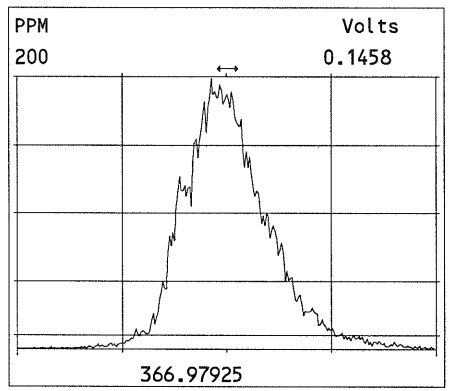


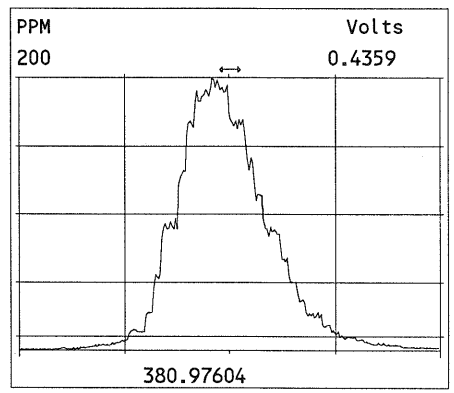


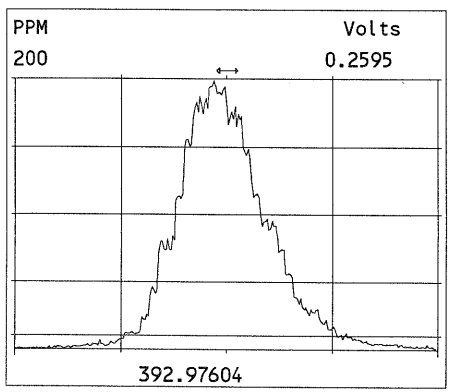


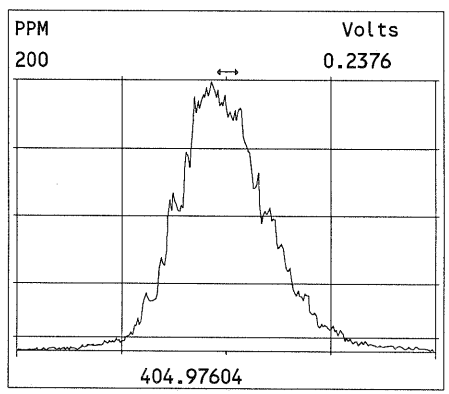


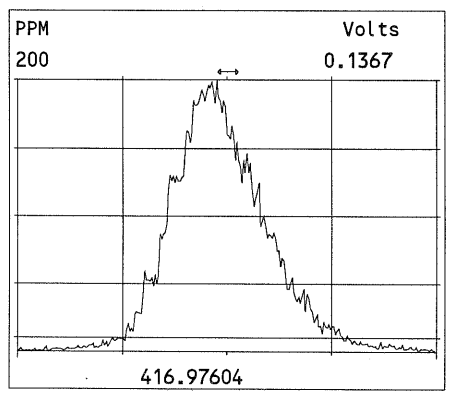




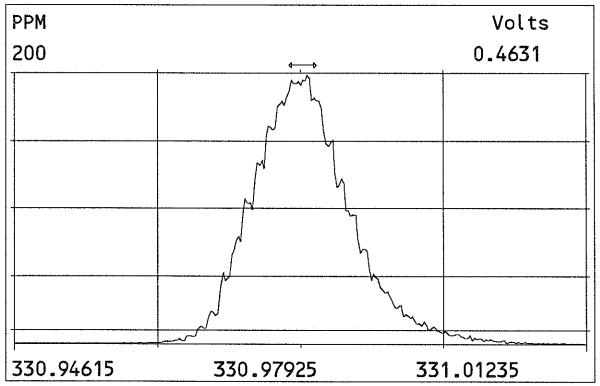


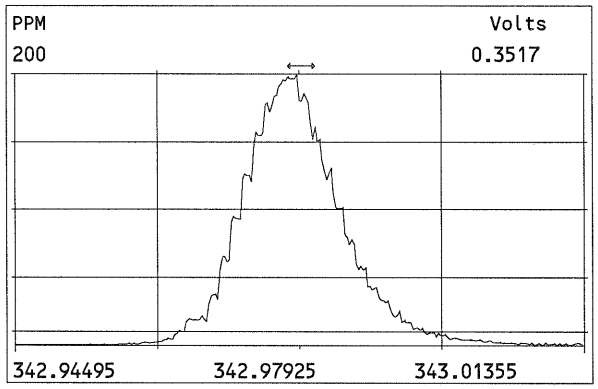


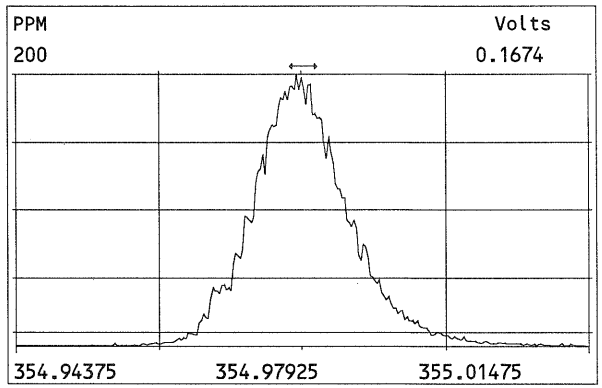


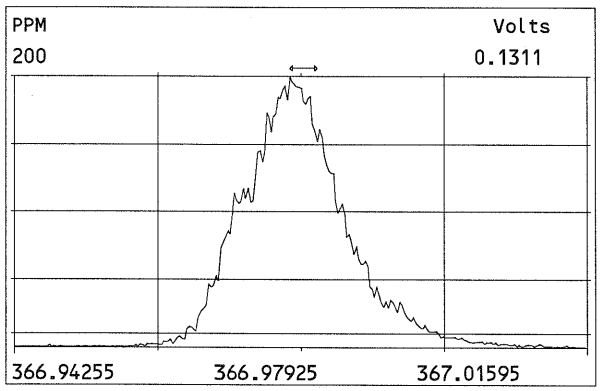


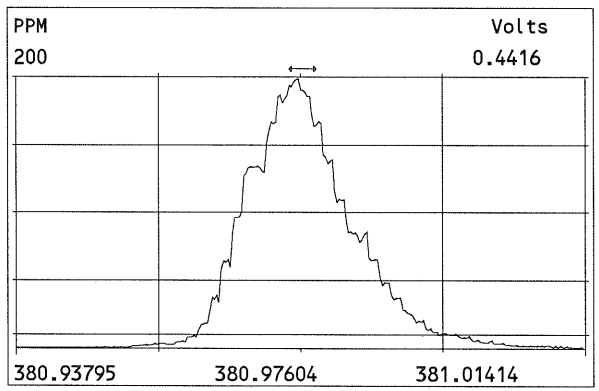
Peak Locate Examination:28-JUL-2006:03:14 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:2 Reference:PFK

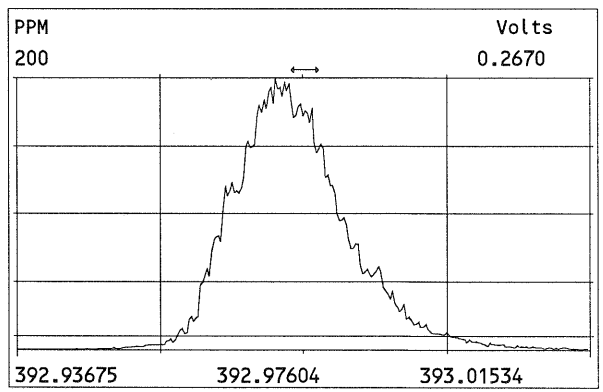


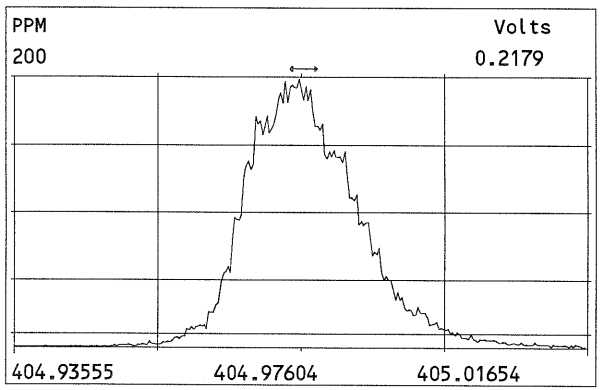


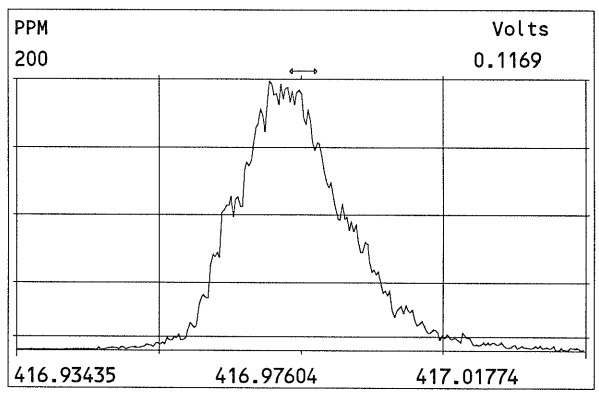




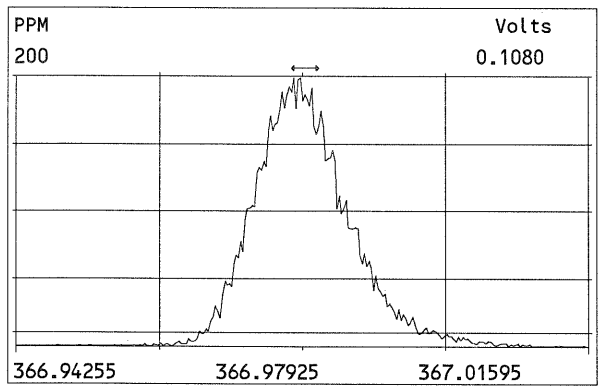


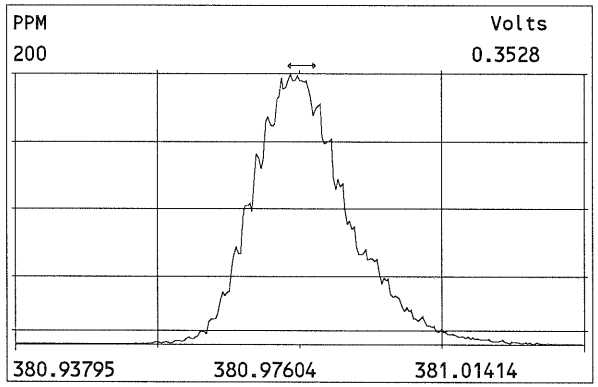


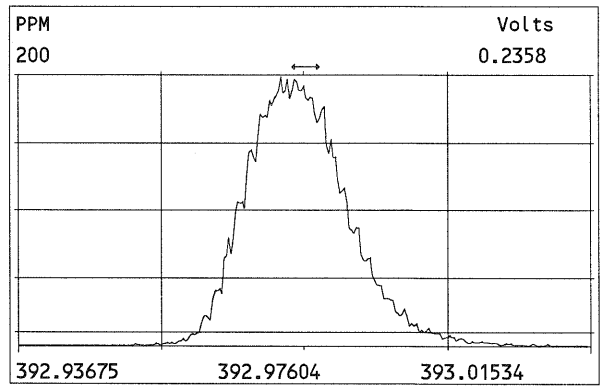


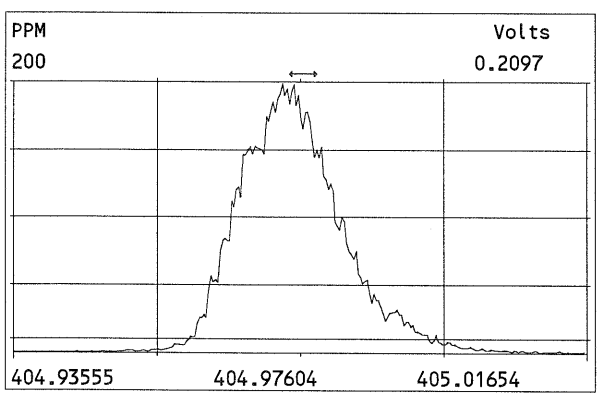


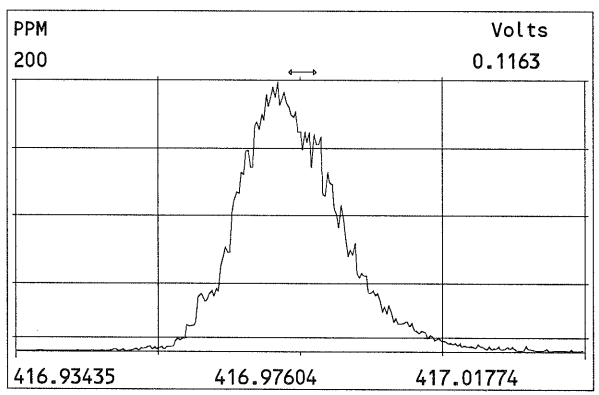
Peak Locate Examination:28-JUL-2006:03:16 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:3 Reference:PFK

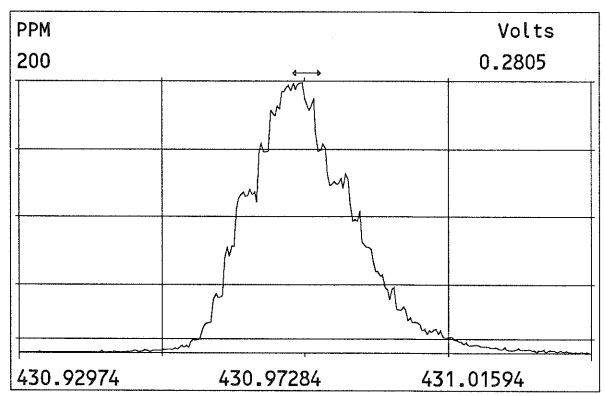


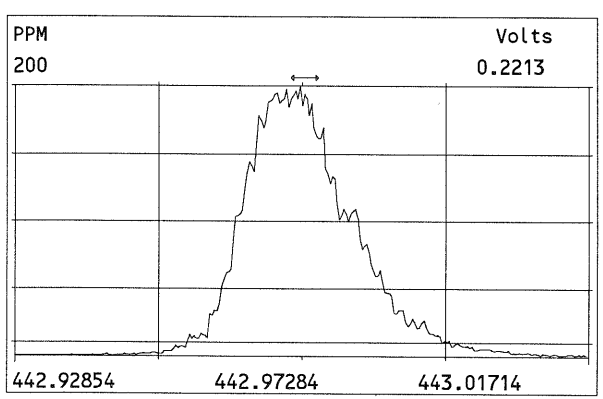


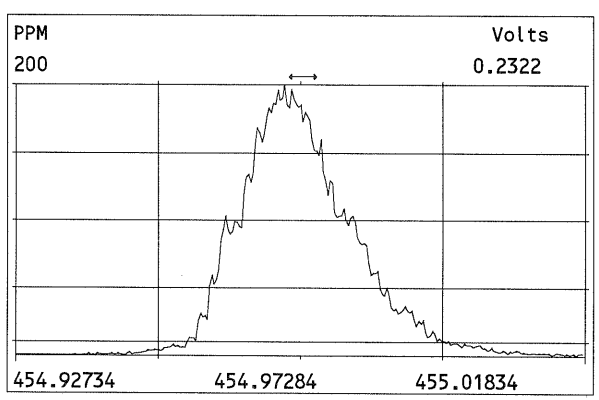




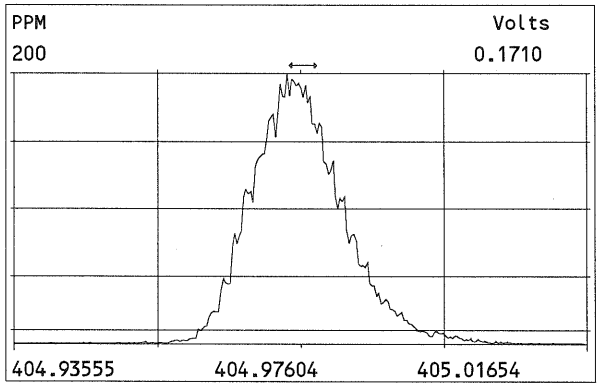


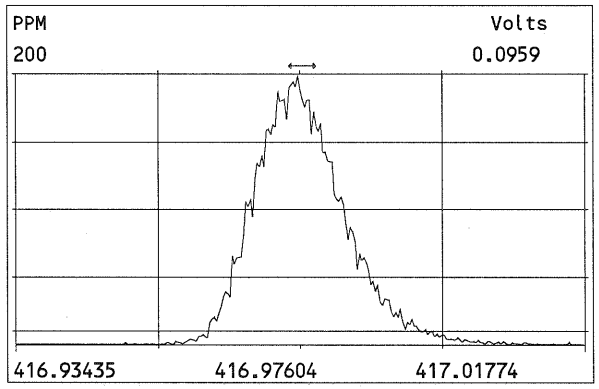


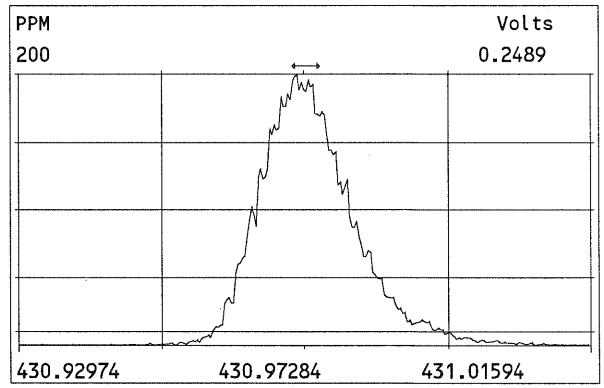


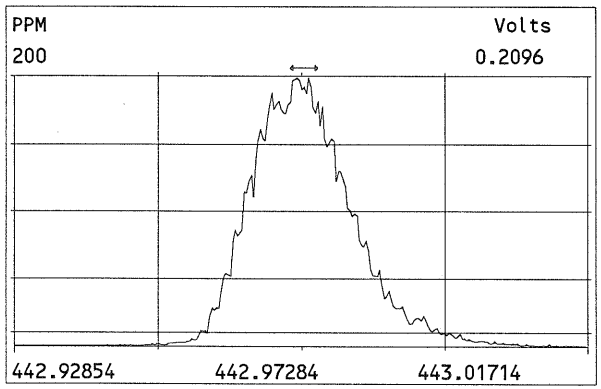


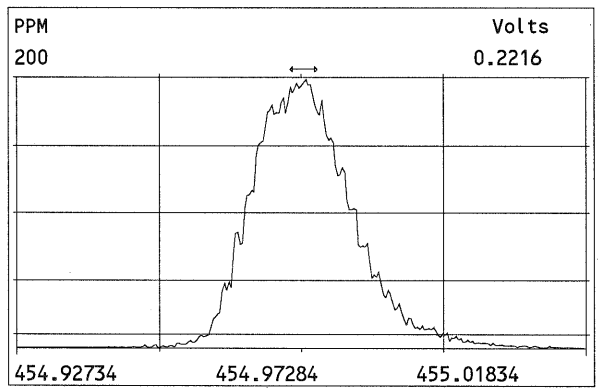
Peak Locate Examination:28-JUL-2006:03:17 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:4 Reference:PFK

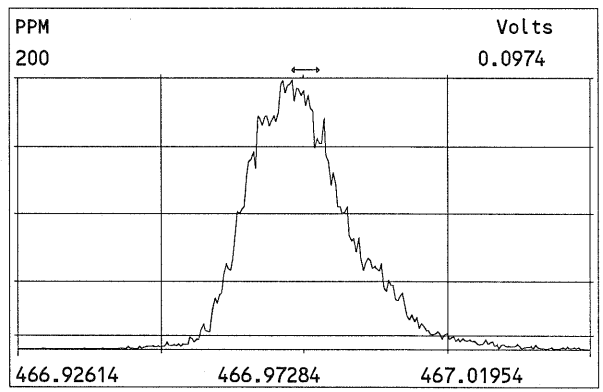


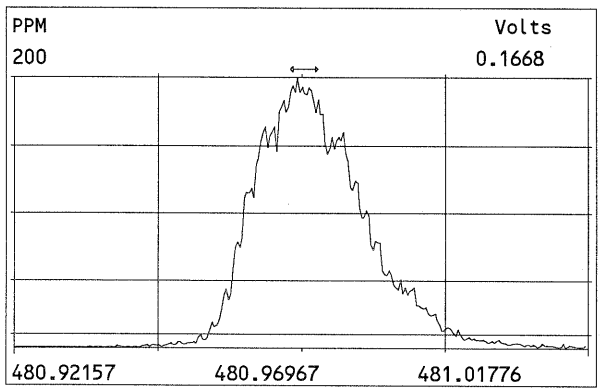




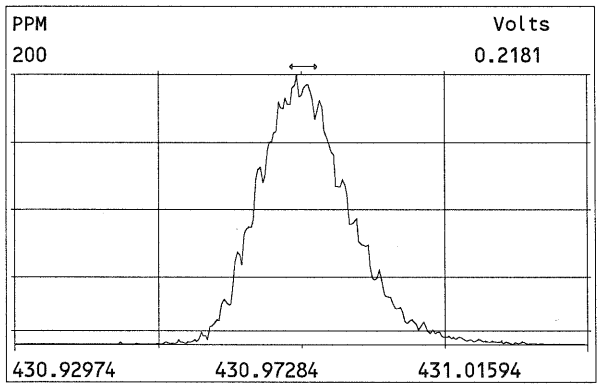


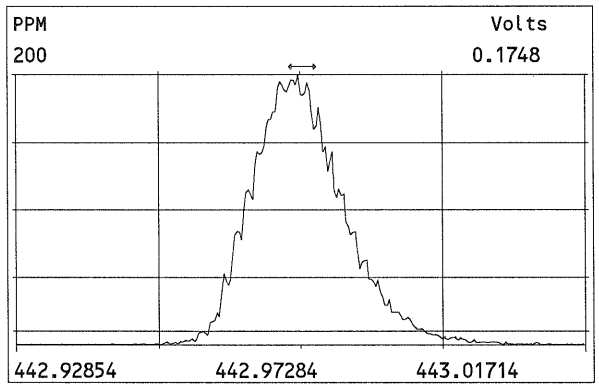


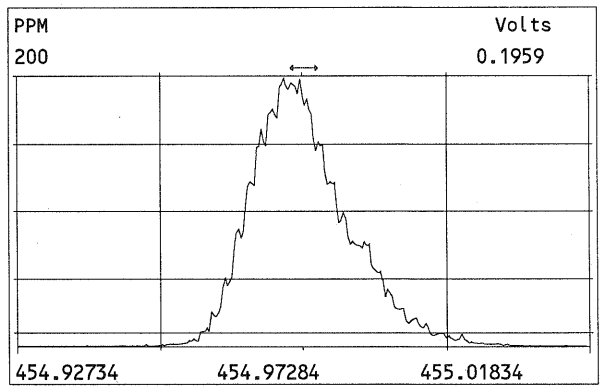


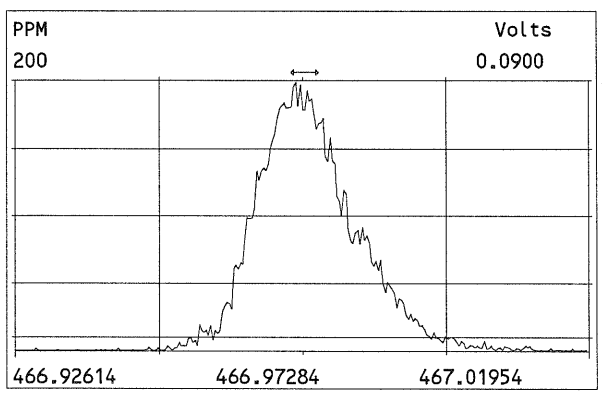


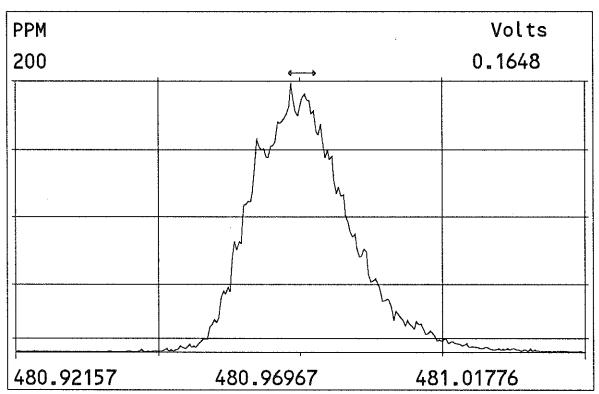
Peak Locate Examination:28-JUL-2006:03:19 File:27JUL06M_RES_CHECK
Experiment:PCDD Function:5 Reference:PFK

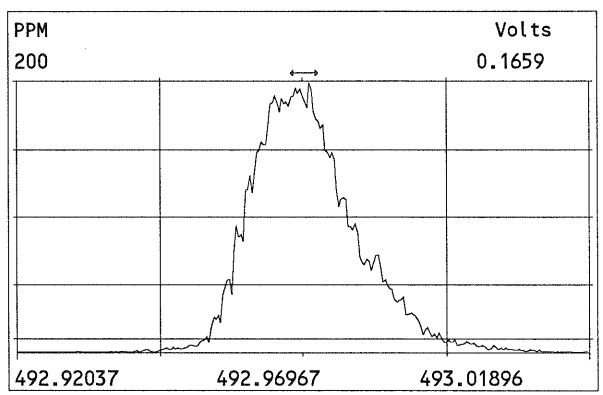


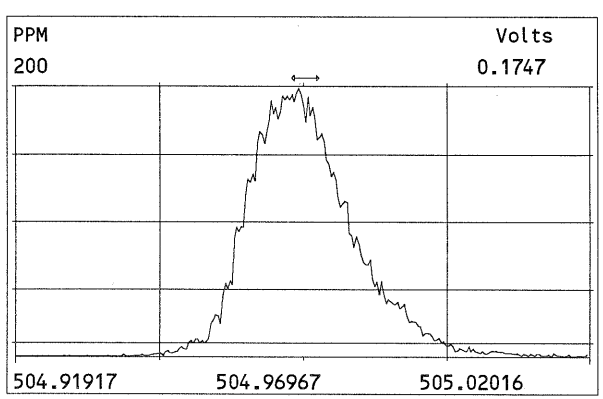


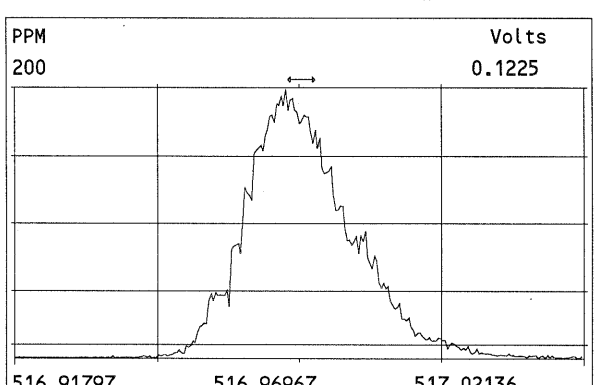












Cyanide

METHOD BLANK RESULTS-CONVENTIONALS
JY95-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 10/06/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	10/02/06	Percent	< 0.01 U
Weak Acid Dissoc. Cyanide	10/03/06	mg/kg	< 0.005 U

SAMPLE RESULTS-CONVENTIONALS
JY95-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 10/06/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Client ID: C-4,S-1
ARI ID: 06-18210 JY95A

Analyte	Date	Method	Units	RL	Sample
Total Solids	10/02/06 100206#1	EPA 160.3	Percent	0.01	27.40
Weak Acid Dissoc. Cyanide	10/03/06 100306#2	SM4500CN-I	mg/kg	0.91	< 0.91 U

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
JY95-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 10/06/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/14/06
Date Received: 07/17/06

Client ID: J-4,S-1
ARI ID: 06-18211 JY95B

Analyte	Date	Method	Units	RL	Sample
Total Solids	10/02/06 100206#1	EPA 160.3	Percent	0.01	39.00
Weak Acid Dissoc. Cyanide	10/03/06 100306#2	SM4500CN-I	mg/kg	0.64	< 0.64 U

RL Analytical reporting limit
U Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
JY95-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/06/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: JY95A Client ID: C-4,S-1					
Total Solids	10/02/06	Percent	27.40	27.70 27.70	0.6%
Weak Acid Dissoc. Cyanide	10/03/06	mg/kg	< 0.91	< 0.91	NA

MS/MSD RESULTS-CONVENTIONALS
JY95-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/06/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: JY95A Client ID: C-4,S-1						
Weak Acid Dissoc. Cyanide	10/03/06	mg/kg	< 0.91	26	34	75.8%

STANDARD REFERENCE RESULTS-CONVENTIONALS
JY95-GEC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized: MB
Reported: 10/06/06

Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Weak Acid Dissoc. Cyanide SPEX #33-6AS	10/03/06	mg/kg	9.9	9.9	100.0%

Herbicides

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 21:58
Instrument/Analyst: ECD1/AAR
Percent Moisture: 77.1%

Sample Amount: 3.44 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	7.3	< 7.3 U
93-76-5	2,4,5-T	7.3	< 7.3 U
88-85-7	Dinoseb	14	< 14 U
1918-00-9	Dicamba	14	< 14 U
94-75-7	2,4-D	29	< 29 U
94-82-6	2,4-DB	140	< 140 U
75-99-0	Dalapon	520	< 520 U
94-74-6	MCPA	14,000	< 14,000 U
120-36-5	Dichloroprop	29	< 29 U
93-65-2	MCPP	7,300	< 7,300 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	49.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: J-3,S-1
SAMPLE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 22:30
Instrument/Analyst: ECD1/AAR
Percent Moisture: 15.6%

Sample Amount: 12.7 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 8.1

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	2.0	< 2.0 U
93-76-5	2,4,5-T	2.0	< 2.0 U
88-85-7	Dinoseb	4.0	< 4.0 U
1918-00-9	Dicamba	4.0	< 4.0 U
94-75-7	2,4-D	7.9	< 7.9 U
94-82-6	2,4-DB	40	< 40 U
75-99-0	Dalapon	140	< 140 U
94-74-6	MCPA	4,000	< 4,000 U
120-36-5	Dichloroprop	7.9	< 7.9 U
93-65-2	MCPP	2,000	< 2,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	95.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: J-5,S-1
SAMPLE

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 08/01/06 00:06
Instrument/Analyst: ECD1/AAR
Percent Moisture: 53.9%

Sample Amount: 6.92 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.7

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	3.6	< 3.6 U
93-76-5	2,4,5-T	3.6	< 3.6 U
88-85-7	Dinoseb	7.2	< 7.2 U
1918-00-9	Dicamba	7.2	< 7.2 U
94-75-7	2,4-D	14	< 14 U
94-82-6	2,4-DB	72	< 72 U
75-99-0	Dalapon	260	< 260 U
94-74-6	MCPA	7,200	< 7,200 U
120-36-5	Dichloroprop	14	< 14 U
93-65-2	MCPP	3,600	< 3,600 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	47.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD

Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 08/01/06 00:38
Instrument/Analyst: ECD1/AAR
Percent Moisture: 70.2%

Sample Amount: 4.48 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.6	< 5.6 U
93-76-5	2,4,5-T	5.6	< 5.6 U
88-85-7	Dinoseb	11	< 11 U
1918-00-9	Dicamba	11	< 11 U
94-75-7	2,4-D	22	< 22 U
94-82-6	2,4-DB	110	< 110 U
75-99-0	Dalapon	400	< 400 U
94-74-6	MCPA	11,000	< 11,000 U
120-36-5	Dichloroprop	22	< 22 U
93-65-2	MCPP	5,600	< 5,600 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	61.9%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

Client ID	DCPA	TOT OUT
MB-072506	83.6%	0
LCS-072506	87.8%	0
J-1,S-1	49.2%	0
J-3,S-1	95.9%	0
J-5,S-1	47.8%	0
J-4,S-1	61.9%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-12485 to 06-12488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 19:18
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	21.8	16.7	131%
2,4,5-T	18.1	16.7	108%
Dinoseb	< 3.33	33.3	NA
Dicamba	34.1	33.3	102%
2,4-D	55.4	66.7	83.1%
2,4-DB	334	333	100%
Dalapon	73.4	66.7	110%
MCPA	11400	16700	68.3%
Dichloroprop	56.7	66.7	85.0%
MCPP	17200	16700	103%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	87.8%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: NA
Date Received: NA

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 18:46
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	83.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 19:50
Instrument/Analyst: ECD1/AAR
Percent Moisture: 67.6%

Sample Amount: 4.87 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 6.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.1	< 5.1 U
93-76-5	2,4,5-T	5.1	< 5.1 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	< 10 U
94-75-7	2,4-D	20	< 20 U
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	370	< 370 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,100	< 5,100 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	69.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 20:22
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.2%

Sample Amount: 3.72 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.7	< 6.7 U
93-76-5	2,4,5-T	6.7	< 6.7 U
88-85-7	Dinoseb	13	< 13 U
1918-00-9	Dicamba	13	< 13 U
94-75-7	2,4-D	27	< 27 U
94-82-6	2,4-DB	130	< 130 U
75-99-0	Dalapon	480	< 480 U
94-74-6	MCPA	13,000	< 13,000 U
120-36-5	Dichloroprop	27	< 27 U
93-65-2	MCPP	6,700	< 6,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	52.8%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
C-12,S-2C/3C	69.8%	0
MB-072506	83.6%	0
LCS-072506	87.8%	0
C-6,S-1	52.8%	0
C-6,S-1 MS	48.4%	0
C-6,S-1 MSD	96.4%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-12379 to 06-12380

FORM-II SW8151A

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-6,S-1
MS/MSD

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted MS/MSD: 07/25/06

Date Analyzed MS: 07/31/06 20:54
MSD: 21:26 21:26
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR
Percent Moisture: 75.2%

Sample Amount MS: 3.72 g-dry-wt
MSD: 3.72 g-dry-wt
Final Extract Volume MS: 10 mL
MSD: 10 mL
Dilution Factor MS: 1.00
MSD: 1.00
pH: 7.4

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
2,4,5-TP (Silvex)	< 6.72	80.4	67.2	120%	73.5	67.2	109%	9.0%
Dicamba	< 13.4	126	134	94.0%	114	134	85.1%	10.0%
2,4-D	< 26.9	288	269	107%	294	269	109%	2.1%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD

Sample ID: C-6,S-1
MATRIX SPIKE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 20:54
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.2%

Sample Amount: 3.72 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.7	---
93-76-5	2,4,5-T	6.7	< 6.7 U
88-85-7	Dinoseb	13	< 13 U
1918-00-9	Dicamba	13	---
94-75-7	2,4-D	27	---
94-82-6	2,4-DB	130	< 130 U
75-99-0	Dalapon	480	< 480 U
94-74-6	MCPA	13,000	< 13,000 U
120-36-5	Dichloroprop	27	< 27 U
93-65-2	MCPP	6,700	< 6,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	NA%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-6,S-1
MATRIX SPIKE DUP

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 21:26
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.2%

Sample Amount: 3.72 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.7	---
93-76-5	2,4,5-T	6.7	< 6.7 U
88-85-7	Dinoseb	13	< 13 U
1918-00-9	Dicamba	13	---
94-75-7	2,4-D	27	---
94-82-6	2,4-DB	130	< 130 U
75-99-0	Dalapon	480	< 480 U
94-74-6	MCPA	13,000	< 13,000 U
120-36-5	Dichloroprop	27	< 27 U
93-65-2	MCPP	6,700	< 6,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	96.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 19:18
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	21.8	16.7	131%
2,4,5-T	18.1	16.7	108%
Dinoseb	< 3.33	33.3	NA
Dicamba	34.1	33.3	102%
2,4-D	55.4	66.7	83.1%
2,4-DB	334	333	100%
Dalapon	73.4	66.7	110%
MCPA	11400	16700	68.3%
Dichloroprop	56.7	66.7	85.0%
MCPP	17200	16700	103%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	87.8%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/25/06
Date Analyzed: 07/31/06 18:46
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	83.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-8,S-1
SAMPLE

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/26/06 22:40
Instrument/Analyst: ECD1/AAR
Percent Moisture: 76.0%

Sample Amount: 3.60 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.9	< 6.9 U
93-76-5	2,4,5-T	6.9	< 6.9 U
88-85-7	Dinoseb	14	< 14 U
1918-00-9	Dicamba	14	< 14 U
94-75-7	2,4-D	28	< 28 U
94-82-6	2,4-DB	140	< 140 U
75-99-0	Dalapon	500	< 500 U
94-74-6	MCPA	14,000	< 14,000 U
120-36-5	Dichloroprop	28	< 28 U
93-65-2	MCPP	6,900	< 6,900 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	83.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-4,S-1
SAMPLE

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/26/06 23:12
Instrument/Analyst: ECD1/AAR
Percent Moisture: 74.7%

Sample Amount: 3.80 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.6	< 6.6 U
93-76-5	2,4,5-T	6.6	< 6.6 U
88-85-7	Dinoseb	13	< 13 U
1918-00-9	Dicamba	13	< 13 U
94-75-7	2,4-D	26	< 26 U
94-82-6	2,4-DB	130	< 130 U
75-99-0	Dalapon	470	< 470 U
94-74-6	MCPA	13,000	< 13,000 U
120-36-5	Dichloroprop	26	< 26 U
93-65-2	MCPP	6,600	< 6,600 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	76.2%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-071906	102%	0
LCS-071906	110%	0
C-8,S-1	83.3%	0
C-4,S-1	76.2%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-12109 to 06-12110

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: LCS-071906
LAB CONTROL

Lab Sample ID: LCS-071906
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 13:27
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	15.5	16.7	92.8%
2,4,5-T	16.0	16.7	95.8%
Dinoseb	< 3.33	33.3	NA
Dicamba	27.9	33.3	83.8%
2,4-D	54.4	66.7	81.6%
2,4-DB	321	333	96.4%
Dalapon	56.2	66.7	84.3%
MCPA	11200	16700	67.1%
Dichloroprop	49.0	66.7	73.5%
MCPP	18800	16700	113%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	110%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: MB-071906
METHOD BLANK

Lab Sample ID: MB-071906
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 12:55
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-7,S-1
SAMPLE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 16:07
Instrument/Analyst: ECD1/AAR
Percent Moisture: 28.4%

Sample Amount: 10.7 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.8

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	2.3	< 2.3 U
93-76-5	2,4,5-T	2.3	< 2.3 U
88-85-7	Dinoseb	4.7	< 4.7 U
1918-00-9	Dicamba	4.7	< 4.7 U
94-75-7	2,4-D	9.3	< 9.3 U
94-82-6	2,4-DB	47	< 47 U
75-99-0	Dalapon	170	< 170 U
94-74-6	MCPA	4,700	< 4,700 U
120-36-5	Dichloroprop	9.3	< 9.3 U
93-65-2	MCPP	2,300	< 2,300 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	39.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-1,S-1
SAMPLE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/26/06 21:36
Instrument/Analyst: ECD1/AAR
Percent Moisture: 9.0%

Sample Amount: 13.6 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 9.0

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.8	< 1.8 U
93-76-5	2,4,5-T	1.8	< 1.8 U
88-85-7	Dinoseb	3.7	< 3.7 U
1918-00-9	Dicamba	3.7	< 3.7 U
94-75-7	2,4-D	7.3	< 7.3 U
94-82-6	2,4-DB	37	< 37 U
75-99-0	Dalapon	130	< 130 U
94-74-6	MCPA	3,700	< 3,700 U
120-36-5	Dichloroprop	7.3	< 7.3 U
93-65-2	MCPP	1,800	< 1,800 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	96.8%

ANALYTICAL RESOURCES INCORPORATED

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Herbicides by SW8151A GC/ECD
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Sample ID: C-11,S-1
SAMPLE

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/26/06 22:08
Instrument/Analyst: ECD1/AAR
Percent Moisture: 62.1%

Sample Amount: 5.69 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.2

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	4.4	< 4.4 U
93-76-5	2,4,5-T	4.4	< 4.4 U
88-85-7	Dinoseb	8.8	< 8.8 U
1918-00-9	Dicamba	8.8	< 8.8 U
94-75-7	2,4-D	18	< 18 U
94-82-6	2,4-DB	88	< 88 U
75-99-0	Dalapon	320	< 320 U
94-74-6	MCPA	8,800	< 8,800 U
120-36-5	Dichloroprop	18	< 18 U
93-65-2	MCPP	4,400	< 4,400 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	83.1%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-071906	102%	0
LCS-071906	110%	0
C-7,S-1	39.3%	0
C-7,S-1 MS	39.9%	0
C-7,S-1 MSD	42.9%	0
C-1,S-1	96.8%	0
C-11,S-1	83.1%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-12092 to 06-12094

FORM-II SW8151A

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: C-7,S-1
MS/MSD

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted MS/MSD: 07/19/06

Date Analyzed MS: 07/31/06 16:39
MSD: 17:11 17:11
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR
Percent Moisture: 28.4%

Sample Amount MS: 10.8 g-dry-wt
MSD: 10.7 g-dry-wt
Final Extract Volume MS: 10 mL
MSD: 10 mL
Dilution Factor MS: 1.00
MSD: 1.00
pH: 7.8

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
2,4,5-TP (Silvex)	< 2.33	30.5	23.1	132%	25.2	23.4	108%	19.0%
Dicamba	< 4.66	44.6	46.3	96.3%	40.2	46.7	86.1%	10.4%
2,4-D	< 9.31	82.0	92.6	88.6%	80.2	93.5	85.8%	2.2%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: C-7,S-1
MATRIX SPIKE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 16:39
Instrument/Analyst: ECD1/AAR
Percent Moisture: 28.4%

Sample Amount: 10.8 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.8

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	2.3	---
93-76-5	2,4,5-T	2.3	< 2.3 U
88-85-7	Dinoseb	4.6	< 4.6 U
1918-00-9	Dicamba	4.6	---
94-75-7	2,4-D	9.3	---
94-82-6	2,4-DB	46	< 46 U
75-99-0	Dalapon	170	< 170 U
94-74-6	MCPA	4,600	< 4,600 U
120-36-5	Dichloroprop	9.3	< 9.3 U
93-65-2	MCPP	2,300	< 2,300 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	NA%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-7,S-1
MATRIX SPIKE DUP

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 17:11
Instrument/Analyst: ECD1/AAR
Percent Moisture: 28.4%

Sample Amount: 10.7 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.8

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	2.3	---
93-76-5	2,4,5-T	2.3	< 2.3 U
88-85-7	Dinoseb	4.7	< 4.7 U
1918-00-9	Dicamba	4.7	---
94-75-7	2,4-D	9.4	---
94-82-6	2,4-DB	47	< 47 U
75-99-0	Dalapon	170	< 170 U
94-74-6	MCPA	4,700	< 4,700 U
120-36-5	Dichloroprop	9.4	< 9.4 U
93-65-2	MCPP	2,300	< 2,300 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic Acid	NA%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: LCS-071906
LAB CONTROL

Lab Sample ID: LCS-071906
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 13:27
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	15.5	16.7	92.8%
2,4,5-T	16.0	16.7	95.8%
Dinoseb	< 3.33	33.3	NA
Dicamba	27.9	33.3	83.8%
2,4-D	54.4	66.7	81.6%
2,4-DB	321	333	96.4%
Dalapon	56.2	66.7	84.3%
MCPA	11200	16700	67.1%
Dichloroprop	49.0	66.7	73.5%
MCPP	18800	16700	113%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	110%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: MB-071906
METHOD BLANK

Lab Sample ID: MB-071906
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 12:55
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 15:03
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.1%

Sample Amount: 3.74 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.5

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.7	< 6.7 U
93-76-5	2,4,5-T	6.7	< 6.7 U
88-85-7	Dinoseb	13	< 13 U
1918-00-9	Dicamba	13	< 13 U
94-75-7	2,4-D	27	< 27 U
94-82-6	2,4-DB	130	< 130 U
75-99-0	Dalapon	480	< 480 U
94-74-6	MCPA	52,000	< 49,000 Y
120-36-5	Dichloroprop	27	< 27 U
93-65-2	MCPP	6,700	< 6,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	NR

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 15:35
Instrument/Analyst: ECD1/AAR
Percent Moisture: 73.4%

Sample Amount: 4.00 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.2

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.2	< 6.2 U
93-76-5	2,4,5-T	6.2	< 6.2 U
88-85-7	Dinoseb	12	< 12 U
1918-00-9	Dicamba	12	< 12 U
94-75-7	2,4-D	25	< 25 U
94-82-6	2,4-DB	120	< 120 U
75-99-0	Dalapon	450	< 450 U
94-74-6	MCPA	12,000	< 12,000 U
120-36-5	Dichloroprop	25	< 25 U
93-65-2	MCPP	6,200	< 6,200 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	54.5%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-071906	102%	0
LCS-071906	110%	0
C-10,S-1	NR	0
C-5,S-1	54.5%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-12051 to 06-12052

FORM-II SW8151A

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: LCS-071906
LAB CONTROL

Lab Sample ID: LCS-071906
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 13:27
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	15.5	16.7	92.8%
2,4,5-T	16.0	16.7	95.8%
Dinoseb	< 3.33	33.3	NA
Dicamba	27.9	33.3	83.8%
2,4-D	54.4	66.7	81.6%
2,4-DB	321	333	96.4%
Dalapon	56.2	66.7	84.3%
MCPA	11200	16700	67.1%
Dichloroprop	49.0	66.7	73.5%
MCPP	18800	16700	113%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	110%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: MB-071906
METHOD BLANK

Lab Sample ID: MB-071906
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 12:55
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: C-9,S-1
SAMPLE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 13:59
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.9%

Sample Amount: 3.62 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.6

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.9	< 6.9 U
93-76-5	2,4,5-T	6.9	< 6.9 U
88-85-7	Dinoseb	14	< 14 U
1918-00-9	Dicamba	14	< 14 U
94-75-7	2,4-D	28	< 28 U
94-82-6	2,4-DB	140	< 140 U
75-99-0	Dalapon	500	< 500 U
94-74-6	MCPA	14,000	< 14,000 U
120-36-5	Dichloroprop	28	< 28 U
93-65-2	MCPP	6,900	< 6,900 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	50.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: C-2,S-1
SAMPLE

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 14:31
Instrument/Analyst: ECD1/AAR
Percent Moisture: 72.8%

Sample Amount: 4.09 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.1

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.1	< 6.1 U
93-76-5	2,4,5-T	6.1	< 6.1 U
88-85-7	Dinoseb	12	< 12 U
1918-00-9	Dicamba	12	< 12 U
94-75-7	2,4-D	24	< 24 U
94-82-6	2,4-DB	120	< 120 U
75-99-0	Dalapon	440	< 440 U
94-74-6	MCPA	12,000	< 12,000 U
120-36-5	Dichloroprop	24	< 24 U
93-65-2	MCPP	6,100	< 6,100 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	91.9%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-071906	102%	0
LCS-071906	110%	0
C-9,S-1	50.3%	0
C-2,S-1	91.9%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-12040 to 06-12041

FORM-II SW8151A

Page 1 for JP03

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: LCS-071906
LAB CONTROL

Lab Sample ID: LCS-071906
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 13:27
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	15.5	16.7	92.8%
2,4,5-T	16.0	16.7	95.8%
Dinoseb	< 3.33	33.3	NA
Dicamba	27.9	33.3	83.8%
2,4-D	54.4	66.7	81.6%
2,4-DB	321	333	96.4%
Dalapon	56.2	66.7	84.3%
MCPA	11200	16700	67.1%
Dichloroprop	49.0	66.7	73.5%
MCPP	18800	16700	113%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	110%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: MB-071906
METHOD BLANK

Lab Sample ID: MB-071906
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 08/02/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/19/06
Date Analyzed: 07/31/06 12:55
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	102%

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Herbicides by SW8151A GC/ECD
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Sample ID: MB-070606
METHOD BLANK

Lab Sample ID: MB-070606
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/06/06
Date Analyzed: 07/07/06 22:33
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in μg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	103%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/06/06
Date Analyzed: 07/07/06 23:37
Instrument/Analyst: ECD1/AAR
Percent Moisture: 18.9%

Sample Amount: 12.2 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 6.6

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	2.0	< 2.0 U
93-76-5	2,4,5-T	2.0	< 2.0 U
88-85-7	Dinoseb	4.1	< 4.1 U
1918-00-9	Dicamba	4.1	< 4.1 U
94-75-7	2,4-D	8.2	< 8.2 U
94-82-6	2,4-DB	41	< 41 U
75-99-0	Dalapon	150	< 150 U
94-74-6	MCPA	4,100	< 4,100 U
120-36-5	Dichloroprop	8.2	< 8.2 U
93-65-2	MCPP	2,000	< 2,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	127%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG6-S1
SAMPLE

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 00:09
Instrument/Analyst: ECD1/AAR
Percent Moisture: 67.9%

Sample Amount: 4.82 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 6.6

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.2	< 5.2 U
93-76-5	2,4,5-T	5.2	< 5.2 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	< 10 U
94-75-7	2,4-D	21	< 21 U
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	370	< 370 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	21	< 21 U
93-65-2	MCPP	5,200	< 5,200 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	132%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 00:41
Instrument/Analyst: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount: 4.99 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.0	< 5.0 U
93-76-5	2,4,5-T	5.0	< 5.0 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	< 10 U
94-75-7	2,4-D	20	< 20 U
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	360	< 360 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,000	< 5,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	138%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
MS/MSD

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/06/06

Date Analyzed MS: 07/08/06 01:13
MSD: 01:45 01:45
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount MS: 4.99 g-dry-wt
MSD: 4.99 g-dry-wt
Final Extract Volume MS: 10 mL
MSD: 10 mL
Dilution Factor MS: 1.00
MSD: 1.00
pH: 7.3

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
2,4,5-TP (Silvex)	< 5.01	< 5.01	50.1	NA	36.2	50.1	72.3%	NA
Dicamba	< 10.0	< 10.0	100	NA	113	100	113%	NA
2,4-D	< 20.0	< 20.0	200	NA	277	200	138%	NA

Results reported in µg/kg (ppb)
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.
RPD calculated using sample concentrations per SW846.

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Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 01:13
Instrument/Analyst: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount: 4.99 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.0	---
93-76-5	2,4,5-T	5.0	< 5.0 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	---
94-75-7	2,4-D	20	---
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	360	< 360 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,000	< 5,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	1.8%

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Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: IG2-S1
MATRIX SPIKE DUP

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 01:45
Instrument/Analyst: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount: 4.99 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.0	---
93-76-5	2,4,5-T	5.0	< 5.0 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	---
94-75-7	2,4-D	20	---
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	360	< 360 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,000	< 5,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	124%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
REEXTRACT

Lab Sample ID: JO17A
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/10/06
Date Analyzed: 07/11/06 19:47
Instrument/Analyst: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount: 4.98 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.0	< 5.0 U
93-76-5	2,4,5-T	5.0	< 5.0 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	< 10 U
94-75-7	2,4-D	20	< 20 U
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	360	< 360 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,000	< 5,000 U

Reported in μg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	122%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
MS/MSD

Lab Sample ID: JO17A
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/10/06

Date Analyzed MS: 07/11/06 20:19
MSD: 20:51 20:51
Instrument/Analyst MS: ECD1/AAR
MSD: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount MS: 4.98 g-dry-wt
MSD: 4.99 g-dry-wt
Final Extract Volume MS: 10 mL
MSD: 10 mL
Dilution Factor MS: 1.00
MSD: 1.00
pH: 7.3

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
2,4,5-TP (Silvex)	< 5.02	34.5	50.2	68.7%	32.7	50.1	65.3%	5.4%
Dicamba	< 10.0	105	100	105%	96.6	100	96.6%	8.3%
2,4-D	< 20.1	176	201	87.6%	150	200	75.0%	16.0%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

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Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/10/06
Date Analyzed: 07/11/06 20:19
Instrument/Analyst: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount: 4.98 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.0	---
93-76-5	2,4,5-T	5.0	< 5.0 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	---
94-75-7	2,4-D	20	---
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	360	< 360 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,000	< 5,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	118%

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ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: IG2-S1
MATRIX SPIKE DUP

Lab Sample ID: JO17A
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/10/06
Date Analyzed: 07/11/06 20:51
Instrument/Analyst: ECD1/AAR
Percent Moisture: 66.8%

Sample Amount: 4.99 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.0	---
93-76-5	2,4,5-T	5.0	< 5.0 U
88-85-7	Dinoseb	10	< 10 U
1918-00-9	Dicamba	10	---
94-75-7	2,4-D	20	---
94-82-6	2,4-DB	100	< 100 U
75-99-0	Dalapon	360	< 360 U
94-74-6	MCPA	10,000	< 10,000 U
120-36-5	Dichloroprop	20	< 20 U
93-65-2	MCPP	5,000	< 5,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	103%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 02:16
Instrument/Analyst: ECD1/AAR
Percent Moisture: 47.3%

Sample Amount: 7.90 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.1

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	3.2	< 3.2 U
93-76-5	2,4,5-T	3.2	< 3.2 U
88-85-7	Dinoseb	6.3	< 6.3 U
1918-00-9	Dicamba	6.3	< 6.3 U
94-75-7	2,4-D	13	< 13 U
94-82-6	2,4-DB	63	< 63 U
75-99-0	Dalapon	230	< 230 U
94-74-6	MCPA	6,300	< 6,300 U
120-36-5	Dichloroprop	13	< 13 U
93-65-2	MCPP	3,200	< 3,200 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	108%

ANALYTICAL RESOURCES INCORPORATED

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Herbicides by SW8151A GC/ECD
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Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 02:48
Instrument/Analyst: ECD1/AAR
Percent Moisture: 60.4%

Sample Amount: 5.95 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 6.9

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	4.2	< 4.2 U
93-76-5	2,4,5-T	4.2	< 4.2 U
88-85-7	Dinoseb	8.4	< 8.4 U
1918-00-9	Dicamba	8.4	< 8.4 U
94-75-7	2,4-D	180	< 170 Y
94-82-6	2,4-DB	84	< 84 U
75-99-0	Dalapon	300	< 300 U
94-74-6	MCPA	8,400	< 8,400 U
120-36-5	Dichloroprop	17	< 17 U
93-65-2	MCPP	4,200	< 4,200 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	102%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 04:24
Instrument/Analyst: ECD1/AAR
Percent Moisture: 71.8%

Sample Amount: 4.24 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.3

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	5.9	< 5.9 U
93-76-5	2,4,5-T	5.9	< 5.9 U
88-85-7	Dinoseb	12	< 12 U
1918-00-9	Dicamba	12	< 12 U
94-75-7	2,4-D	24	< 24 U
94-82-6	2,4-DB	120	< 120 U
75-99-0	Dalapon	420	< 420 U
94-74-6	MCPA	12,000	< 12,000 U
120-36-5	Dichloroprop	24	< 24 U
93-65-2	MCPP	5,900	< 5,900 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	103%

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Herbicides by SW8151A GC/ECD
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Sample ID: IG3-S1
SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 04:55
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.5%

Sample Amount: 3.68 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 6.7

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.8	< 6.8 U
93-76-5	2,4,5-T	6.8	< 6.8 U
88-85-7	Dinoseb	14	< 14 U
1918-00-9	Dicamba	14	< 14 U
94-75-7	2,4-D	27	< 27 U
94-82-6	2,4-DB	140	< 140 U
75-99-0	Dalapon	490	< 490 U
94-74-6	MCPA	14,000	< 14,000 U
120-36-5	Dichloroprop	27	< 27 U
93-65-2	MCPP	6,800	< 6,800 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	119%

ANALYTICAL RESOURCES INCORPORATED

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Herbicides by SW8151A GC/ECD
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Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 05:27
Instrument/Analyst: ECD1/AAR
Percent Moisture: 75.6%

Sample Amount: 3.67 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.4

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.8	< 6.8 U
93-76-5	2,4,5-T	6.8	< 6.8 U
88-85-7	Dinoseb	14	< 14 U
1918-00-9	Dicamba	14	< 14 U
94-75-7	2,4-D	27	< 27 U
94-82-6	2,4-DB	140	< 140 U
75-99-0	Dalapon	490	< 490 U
94-74-6	MCPA	14,000	< 14,000 U
120-36-5	Dichloroprop	27	< 27 U
93-65-2	MCPP	6,800	< 6,800 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	167%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 05:59
Instrument/Analyst: ECD1/AAR
Percent Moisture: 74.5%

Sample Amount: 3.83 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 7.5

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	6.5	< 6.5 U
93-76-5	2,4,5-T	6.5	< 6.5 U
88-85-7	Dinoseb	13	< 13 U
1918-00-9	Dicamba	13	< 13 U
94-75-7	2,4-D	26	< 26 U
94-82-6	2,4-DB	130	< 130 U
75-99-0	Dalapon	470	< 470 U
94-74-6	MCPA	13,000	< 13,000 U
120-36-5	Dichloroprop	26	< 26 U
93-65-2	MCPP	6,500	< 6,500 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	151%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Date Extracted: 07/06/06
Date Analyzed: 07/08/06 06:31
Instrument/Analyst: ECD1/AAR
Percent Moisture: 76.1%

Sample Amount: 3.59 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: 6.9

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	7.0	< 7.0 U
93-76-5	2,4,5-T	7.0	< 7.0 U
88-85-7	Dinoseb	14	< 14 U
1918-00-9	Dicamba	14	< 14 U
94-75-7	2,4-D	150	< 140 Y
94-82-6	2,4-DB	140	< 140 U
75-99-0	Dalapon	500	< 500 U
94-74-6	MCPA	14,000	< 14,000 U
120-36-5	Dichloroprop	28	< 28 U
93-65-2	MCPP	7,000	< 7,000 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	95.1%

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-070606	103%	0
LCS-070606	112%	0
IG5-S1	127%	0
IG6-S1	132%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-11362 to 06-11363

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Client ID	DCPA	TOT OUT
MB-070606	103%	0
LCS-070606	112%	0
IG2-S1	138%	0
IG2-S1 MS	1.8%*	1
IG2-S1 MSD	124%	0
MB-071006	92.2%	0
LCS-071006	101%	0
IG2-S1 RE	122%	0
IG2-S1 RE MS	118%	0
IG2-S1 RE MSD	103%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-11567 to 06-12023

FORM-II SW8151A

Page 1 for JO17

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-070606	103%	0
LCS-070606	112%	0
IG1-S1	108%	0
IG9-S1	102%	0
IG7-S1	103%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-11570 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

Client ID	DCPA	TOT OUT
MB-070606	103%	0
LCS-070606	112%	0
IG3-S1	119%	0
IG8-S1	167%*	1
IG4-S1	151%*	1

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-11676 to 06-11678

ANALYTICAL RESOURCES INCORPORATED

SW8151A/HERBICIDE SOIL SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCPA	TOT OUT
MB-070606	103%	0
LCS-070606	112%	0
C3-S1	95.1%	0

	LCS/MB LIMITS	QC LIMITS
(DCPA) = 2,4-Dichlorophenylacetic Acid	(36-129)	(10-147)

Log Number Range: 06-11771 to 06-11771

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: LCS-070606
LAB CONTROL

Lab Sample ID: LCS-070606
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/06/06
Date Analyzed: 07/07/06 23:05
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	15.0	16.7	89.8%
2,4,5-T	15.8	16.7	94.6%
Dinoseb	7.81	33.3	23.5%
Dicamba	31.6	33.3	94.9%
2,4-D	59.4	66.7	89.1%
2,4-DB	317	333	95.2%
Dalapon	53.7	66.7	80.5%
MCPA	16500	16700	98.8%
Dichloroprop	55.3	66.7	82.9%
MCPP	17000	16700	102%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	112%

Results reported in µg/kg (ppb)

4

HERBICIDE METHOD BLANK SUMMARY

SAMPLE NO.

JN72MBS1

Lab Name: ANALYTICAL RESOURCES, INC

Client: G & G ASSOCIATES

ARI Job No.: JN72,JO17,JO18,JO43,JO60

Project: KLAMATH RIVER SEDIMENT

Lab Sample ID: JN72MBS1

Lab File ID: 0707

Matrix (soil/water) SOLID

Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y

Date Extracted: 07/06/06

Date Analyzed (1): 07/07/06

Date Analyzed (2): 07/07/06

Time Analyzed (1): 2233

Time Analyzed (2): 2233

Instrument ID (1): ECD1

Instrument ID (2): ECD1

GC Column (1): CLP1 ID: 0.53(mm)

GC Column (2): CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JN72LCSS1	JN72LCSS1	07/07/06	07/07/06
02	IG5-S1	JN72A	07/07/06	07/07/06
03	IG6-S1	JN72B	07/08/06	07/08/06
04	IG2-S1	JO17A	07/08/06	07/08/06
05	IG2-S1 MS	JO17AMS	07/08/06	07/08/06
06	IG2-S1 MSD	JO17AMSD	07/08/06	07/08/06
07	IG1-S1	JO18A	07/08/06	07/08/06
08	IG9-S1	JO18B	07/08/06	07/08/06
09	IG7-S1	JO18C	07/08/06	07/08/06
10	IG3-S1	JO43A	07/08/06	07/08/06
11	IG8-S1	JO43B	07/08/06	07/08/06
12	IG4-S1	JO43C	07/08/06	07/08/06
13	C3-S1	JO60A	07/08/06	07/08/06

FORM IV HERB

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
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Sample ID: LCS-071006
LAB CONTROL

Lab Sample ID: LCS-071006
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/10/06
Date Analyzed: 07/11/06 19:15
Instrument/Analyst: ECD1/AAR

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00

Analyte	Lab Control	Spike Added	Recovery
2,4,5-TP (Silvex)	16.1	16.7	96.4%
2,4,5-T	17.0	16.7	102%
Dinoseb	6.33	33.3	19.0%
Dicamba	33.9	33.3	102%
2,4-D	64.7	66.7	97.0%
2,4-DB	343	333	103%
Dalapon	65.8	66.7	98.7%
MCPA	17400	16700	104%
Dichloroprop	64.3	66.7	96.4%
MCPP	19400	16700	116%

Herbicide Surrogate Recovery

2,4-Dichlorophenylacetic	101%

Results reported in µg/kg (ppb)

4

HERBICIDE METHOD BLANK SUMMARY

SAMPLE NO.

JO17MBS2

Lab Name: ANALYTICAL RESOURCES, INC

Client: G & G ASSOCIATES

ARI Job No.: JO17

Project: KLAMATH RIVER SEDIMENT

Lab Sample ID: JO17MBS2

Lab File ID: 0711

Matrix (soil/water) SOLID

Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y

Date Extracted: 07/10/06

Date Analyzed (1): 07/11/06

Date Analyzed (2): 07/11/06

Time Analyzed (1): 1843

Time Analyzed (2): 1843

Instrument ID (1): ECD1

Instrument ID (2): ECD1

GC Column (1): CLP1 ID: 0.53(mm)

GC Column (2): CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JO17LCSS2	JO17LCSS2	07/11/06	07/11/06
02	IG2-S1	JO17A	07/11/06	07/11/06
03	IG2-S1 MS	JO17AMS	07/11/06	07/11/06
04	IG2-S1 MSD	JO17AMSD	07/11/06	07/11/06

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FORM IV HERB

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Herbicides by SW8151A GC/ECD
Page 1 of 1

Sample ID: MB-071006
METHOD BLANK

Lab Sample ID: MB-071006
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/14/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: NA
Date Received: NA

Date Extracted: 07/10/06
Date Analyzed: 07/11/06 18:43
Instrument/Analyst: ECD1/AAR
Percent Moisture: NA

Sample Amount: 15.0 g-dry-wt
Final Extract Volume: 10 mL
Dilution Factor: 1.00
pH: NA

CAS Number	Analyte	RL	Result
93-72-1	2,4,5-TP (Silvex)	1.7	< 1.7 U
93-76-5	2,4,5-T	1.7	< 1.7 U
88-85-7	Dinoseb	3.3	< 3.3 U
1918-00-9	Dicamba	3.3	< 3.3 U
94-75-7	2,4-D	6.7	< 6.7 U
94-82-6	2,4-DB	33	< 33 U
75-99-0	Dalapon	120	< 120 U
94-74-6	MCPA	3,300	< 3,300 U
120-36-5	Dichloroprop	6.7	< 6.7 U
93-65-2	MCPP	1,700	< 1,700 U

Reported in µg/kg (ppb)

Herbicide Surrogate Recovery	
2,4-Dichlorophenylacetic Acid	92.2%

Metals

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Percent Total Solids: 22.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/20/06	6010B	07/26/06	7440-36-0	Antimony	20	20	U
3050B	07/20/06	6010B	07/26/06	7440-38-2	Arsenic	20	20	U
3050B	07/20/06	6010B	07/26/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/20/06	6010B	07/26/06	**7440-70-2**	**Calcium**	20	**5,600**	
3050B	07/20/06	6010B	07/26/06	**7440-47-3**	**Chromium**	2	**31**	
3050B	07/20/06	6010B	07/26/06	**7440-50-8**	**Copper**	0.8	**38.6**	
3050B	07/20/06	6010B	07/26/06	**7439-92-1**	**Lead**	8	**10**	
3050B	07/20/06	6010B	07/26/06	**7439-96-5**	**Manganese**	0.4	**358**	
CLP	07/19/06	7471A	07/19/06	7439-97-6	Mercury	0.2	0.2	U
3050B	07/20/06	6010B	07/26/06	**7440-02-0**	**Nickel**	4	**26**	
3050B	07/20/06	6010B	07/26/06	7782-49-2	Selenium	20	20	U
3050B	07/20/06	6010B	07/26/06	7440-22-4	Silver	1	1	U
3050B	07/20/06	6010B	07/26/06	**7440-66-6**	**Zinc**	3	**75**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: J-3,S-1
SAMPLE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Percent Total Solids: 77.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/20/06	6010B	07/26/06	7440-36-0	Antimony	6	6	U
3050B	07/20/06	6010B	07/26/06	**7440-38-2**	**Arsenic**	6	**9**	
3050B	07/20/06	6010B	07/26/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/20/06	6010B	07/26/06	**7440-70-2**	**Calcium**	6	**11,600**	
3050B	07/20/06	6010B	07/26/06	**7440-47-3**	**Chromium**	0.6	**16.8**	
3050B	07/20/06	6010B	07/26/06	**7440-50-8**	**Copper**	0.2	**24.2**	
3050B	07/20/06	6010B	07/26/06	7439-92-1	Lead	2	2	U
3050B	07/20/06	6010B	07/26/06	**7439-96-5**	**Manganese**	0.1	**172**	
CLP	07/19/06	7471A	07/19/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/20/06	6010B	07/26/06	**7440-02-0**	**Nickel**	1	**26**	
3050B	07/20/06	6010B	07/26/06	7782-49-2	Selenium	6	6	U
3050B	07/20/06	6010B	07/26/06	7440-22-4	Silver	0.4	0.4	U
3050B	07/20/06	6010B	07/26/06	**7440-66-6**	**Zinc**	0.7	**28.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: J-5,S-1
SAMPLE

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Percent Total Solids: 37.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/20/06	6010B	07/26/06	7440-36-0	Antimony	10	10	U
3050B	07/20/06	6010B	07/26/06	7440-38-2	Arsenic	10	10	U
3050B	07/20/06	6010B	07/26/06	7440-43-9	Cadmium	0.5	0.5	U
3050B	07/20/06	6010B	07/26/06	**7440-70-2**	**Calcium**	10	**9,890**	
3050B	07/20/06	6010B	07/26/06	**7440-47-3**	**Chromium**	1	**28**	
3050B	07/20/06	6010B	07/26/06	**7440-50-8**	**Copper**	0.5	**26.6**	
3050B	07/20/06	6010B	07/26/06	**7439-92-1**	**Lead**	5	**6**	
3050B	07/20/06	6010B	07/26/06	**7439-96-5**	**Manganese**	0.3	**259**	
CLP	07/19/06	7471A	07/19/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/20/06	6010B	07/26/06	**7440-02-0**	**Nickel**	3	**34**	
3050B	07/20/06	6010B	07/26/06	7782-49-2	Selenium	10	10	U
3050B	07/20/06	6010B	07/26/06	7440-22-4	Silver	0.8	0.8	U
3050B	07/20/06	6010B	07/26/06	**7440-66-6**	**Zinc**	2	**53**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Percent Total Solids: 33.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/20/06	6010B	07/26/06	7440-36-0	Antimony	10	10	U
3050B	07/20/06	6010B	07/26/06	7440-38-2	Arsenic	10	10	U
3050B	07/20/06	6010B	07/26/06	7440-43-9	Cadmium	0.6	0.6	U
3050B	07/20/06	6010B	07/26/06	**7440-70-2**	**Calcium**	10	**8,670**	
3050B	07/20/06	6010B	07/26/06	**7440-47-3**	**Chromium**	1	**29**	
3050B	07/20/06	6010B	07/26/06	**7440-50-8**	**Copper**	0.6	**27.0**	
3050B	07/20/06	6010B	07/26/06	**7439-92-1**	**Lead**	6	**6**	
3050B	07/20/06	6010B	07/26/06	**7439-96-5**	**Manganese**	0.3	**240**	
CLP	07/19/06	7471A	07/19/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/20/06	6010B	07/26/06	**7440-02-0**	**Nickel**	3	**32**	
3050B	07/20/06	6010B	07/26/06	7782-49-2	Selenium	10	10	U
3050B	07/20/06	6010B	07/26/06	7440-22-4	Silver	0.9	0.9	U
3050B	07/20/06	6010B	07/26/06	**7440-66-6**	**Zinc**	2	**50**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: JP75MB
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/20/06	6010B	07/26/06	7440-36-0	Antimony	5	5	U
3050B	07/20/06	6010B	07/26/06	7440-38-2	Arsenic	5	5	U
3050B	07/20/06	6010B	07/26/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/20/06	6010B	07/26/06	7440-70-2	Calcium	5	5	U
3050B	07/20/06	6010B	07/26/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/20/06	6010B	07/26/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/20/06	6010B	07/26/06	7439-92-1	Lead	2	2	U
3050B	07/20/06	6010B	07/26/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/19/06	7471A	07/19/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/20/06	6010B	07/26/06	7440-02-0	Nickel	1	1	U
3050B	07/20/06	6010B	07/26/06	7782-49-2	Selenium	5	5	U
3050B	07/20/06	6010B	07/26/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/20/06	6010B	07/26/06	**7440-66-6**	**Zinc**	0.6	**0.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
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Sample ID: LAB CONTROL

Lab Sample ID: JP75LCS
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/27/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	218	200	109%	
Arsenic	6010B	204	200	102%	
Cadmium	6010B	51.7	50.0	103%	
Calcium	6010B	966	1000	96.6%	
Chromium	6010B	48.2	50.0	96.4%	
Copper	6010B	50.6	50.0	101%	
Lead	6010B	204	200	102%	
Manganese	6010B	48.0	50.0	96.0%	
Mercury	7471A	1.05	1.00	105%	
Nickel	6010B	47	50	94.0%	
Selenium	6010B	207	200	104%	
Silver	6010B	50.0	50.0	100%	
Zinc	6010B	47.5	50.0	95.0%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
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Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Percent Total Solids: 33.4%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/19/06	6010B	07/24/06	7440-36-0	Antimony	10	10	U
3050B	07/19/06	6010B	07/24/06	7440-38-2	Arsenic	10	10	U
3050B	07/19/06	6010B	07/24/06	7440-43-9	Cadmium	0.6	0.6	U
3050B	07/19/06	6010B	07/24/06	**7440-70-2**	**Calcium**	10	**8,870**	
3050B	07/19/06	6010B	07/24/06	**7440-47-3**	**Chromium**	1	**29**	
3050B	07/19/06	6010B	07/24/06	**7440-50-8**	**Copper**	0.6	**28.0**	
3050B	07/19/06	6010B	07/24/06	**7439-92-1**	**Lead**	6	**6**	
3050B	07/19/06	6010B	07/24/06	**7439-96-5**	**Manganese**	0.3	**447**	
CLP	07/18/06	7471A	07/19/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/19/06	6010B	07/24/06	**7440-02-0**	**Nickel**	3	**26**	
3050B	07/19/06	6010B	07/24/06	7782-49-2	Selenium	10	10	U
3050B	07/19/06	6010B	07/24/06	7440-22-4	Silver	0.9	0.9	U
3050B	07/19/06	6010B	07/24/06	**7440-66-6**	**Zinc**	2	**72**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Percent Total Solids: 24.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/19/06	6010B	07/24/06	7440-36-0	Antimony	20	20	U
3050B	07/19/06	6010B	07/24/06	7440-38-2	Arsenic	20	20	U
3050B	07/19/06	6010B	07/24/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/19/06	6010B	07/24/06	**7440-70-2**	**Calcium**	20	**4,330**	
3050B	07/19/06	6010B	07/24/06	**7440-47-3**	**Chromium**	2	**28**	
3050B	07/19/06	6010B	07/24/06	**7440-50-8**	**Copper**	0.8	**29.6**	
3050B	07/19/06	6010B	07/24/06	**7439-92-1**	**Lead**	8	**9**	
3050B	07/19/06	6010B	07/24/06	**7439-96-5**	**Manganese**	0.4	**541**	
CLP	07/18/06	7471A	07/19/06	7439-97-6	Mercury	0.2	0.2	U
3050B	07/19/06	6010B	07/24/06	**7440-02-0**	**Nickel**	4	**23**	
3050B	07/19/06	6010B	07/24/06	7782-49-2	Selenium	20	20	U
3050B	07/19/06	6010B	07/24/06	7440-22-4	Silver	1	1	U
3050B	07/19/06	6010B	07/24/06	**7440-66-6**	**Zinc**	2	**64**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

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TOTAL METALS
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Sample ID: C-6,S-1
DUPLICATE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6010B	20 U	20 U	0.0%	+/- 20	L
Arsenic	6010B	20 U	20 U	0.0%	+/- 20	L
Cadmium	6010B	0.8 U	0.8 U	0.0%	+/- 0.8	L
Calcium	6010B	4,330	4,390	1.4%	+/- 20%	
Chromium	6010B	28	29	3.5%	+/- 20%	
Copper	6010B	29.6	29.8	0.7%	+/- 20%	
Lead	6010B	9	9	0.0%	+/- 8	L
Manganese	6010B	541	541	0.0%	+/- 20%	
Mercury	7471A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Nickel	6010B	23	24	4.3%	+/- 20%	
Selenium	6010B	20 U	20 U	0.0%	+/- 20	L
Silver	6010B	1 U	1 U	0.0%	+/- 1	L
Zinc	6010B	64	66	3.1%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
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Sample ID: C-6,S-1
MATRIX SPIKE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6010B	20 U	290	762	38.1%	N
Arsenic	6010B	20 U	700	762	91.9%	
Cadmium	6010B	0.8 U	179	190	94.2%	
Calcium	6010B	4,330	7,950	3,810	95.0%	
Chromium	6010B	28	198	190	89.5%	
Copper	6010B	29.6	214	190	97.1%	
Lead	6010B	9	722	762	93.6%	
Manganese	6010B	541	711	190	89.5%	
Mercury	7471A	0.2 U	2.0	1.82	110%	
Nickel	6010B	23	200	190	93.2%	
Selenium	6010B	20 U	710	762	93.2%	
Silver	6010B	1 U	178	190	93.7%	
Zinc	6010B	64	247	190	96.3%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: METHOD BLANK

Lab Sample ID: JP58MB
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/19/06	6010B	07/24/06	7440-36-0	Antimony	5	5	U
3050B	07/19/06	6010B	07/24/06	7440-38-2	Arsenic	5	5	U
3050B	07/19/06	6010B	07/24/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/19/06	6010B	07/24/06	7440-70-2	Calcium	5	5	U
3050B	07/19/06	6010B	07/24/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/19/06	6010B	07/24/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/19/06	6010B	07/24/06	7439-92-1	Lead	2	2	U
3050B	07/19/06	6010B	07/24/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/18/06	7471A	07/19/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/19/06	6010B	07/24/06	7440-02-0	Nickel	1	1	U
3050B	07/19/06	6010B	07/24/06	7782-49-2	Selenium	5	5	U
3050B	07/19/06	6010B	07/24/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/19/06	6010B	07/24/06	**7440-66-6**	**Zinc**	0.6	**0.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: LAB CONTROL

Lab Sample ID: JP58LCS
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	213	200	106%	
Arsenic	6010B	189	200	94.5%	
Cadmium	6010B	48.5	50.0	97.0%	
Calcium	6010B	946	1000	94.6%	
Chromium	6010B	46.4	50.0	92.8%	
Copper	6010B	47.8	50.0	95.6%	
Lead	6010B	192	200	96.0%	
Manganese	6010B	46.4	50.0	92.8%	
Mercury	7471A	1.04	1.00	104%	
Nickel	6010B	47	50	94.0%	
Selenium	6010B	190	200	95.0%	
Silver	6010B	47.1	50.0	94.2%	
Zinc	6010B	48.5	50.0	97.0%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Percent Total Solids: 79.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.6	0.6	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	10	**11,400**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	1	**36**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.6	**51.3**	
3050B	07/06/06	6010B	07/10/06	7439-92-1	Lead	6	6	U
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.3	**665**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.06	0.06	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	3	**40**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.9	0.9	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**76**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: IG6-S1
SAMPLE

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Percent Total Solids: 30.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.6	0.6	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	20	**8,980**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	2	**26**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.6	**39.0**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	6	**9**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.3	**506**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	3	**21**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.9	0.9	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**89**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: METHOD BLANK

Lab Sample ID: JN72MB
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/06/06	6010B	07/10/06	7440-70-2	Calcium	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/06/06	6010B	07/10/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/06/06	6010B	07/10/06	7439-92-1	Lead	2	2	U
3050B	07/06/06	6010B	07/10/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/06/06	6010B	07/10/06	7440-02-0	Nickel	1	1	U
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/06/06	6010B	07/10/06	7440-66-6	Zinc	0.6	0.6	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: LAB CONTROL

Lab Sample ID: JN72LCS
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	207	200	104%	
Arsenic	6010B	205	200	102%	
Cadmium	6010B	51.1	50.0	102%	
Calcium	6010B	993	1000	99.3%	
Chromium	6010B	46.8	50.0	93.6%	
Copper	6010B	48.9	50.0	97.8%	
Lead	6010B	200	200	100%	
Manganese	6010B	46.6	50.0	93.2%	
Mercury	7471A	1.11	1.00	111%	
Nickel	6010B	47	50	94.0%	
Selenium	6010B	209	200	104%	
Silver	6010B	49.9	50.0	99.8%	
Zinc	6010B	46.9	50.0	93.8%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Percent Total Solids: 24.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	20	**5,590**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	2	**31**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.8	**36.3**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	8	**9**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.4	**383**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	4	**27**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	1	1	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**75**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Percent Total Solids: 33.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.6	0.6	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	10	**8,300**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	1	**25**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.6	**38.5**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	6	**8**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.3	**768**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	3	**21**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.9	0.9	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**80**	

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: IG2-S1
DUPLICATE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6010B	10 U	10 U	0.0%	+/- 10	L
Arsenic	6010B	10 U	10 U	0.0%	+/- 10	L
Cadmium	6010B	0.6 U	0.6 U	0.0%	+/- 0.6	L
Calcium	6010B	8,300	8,530	2.7%	+/- 20%	
Chromium	6010B	25	26	3.9%	+/- 20%	
Copper	6010B	38.5	39.7	3.1%	+/- 20%	
Lead	6010B	8	9	11.8%	+/- 6	L
Manganese	6010B	768	782	1.8%	+/- 20%	
Mercury	7471A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	6010B	21	22	4.7%	+/- 20%	
Selenium	6010B	10 U	10 U	0.0%	+/- 10	L
Silver	6010B	0.9 U	0.9 U	0.0%	+/- 0.9	L
Zinc	6010B	80	82	2.5%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

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Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6010B	10 U	180	585	30.8%	N
Arsenic	6010B	10 U	570	585	97.4%	
Cadmium	6010B	0.6 U	140	146	95.9%	
Calcium	6010B	8,300	11,100	2,930	95.6%	
Chromium	6010B	25	152	146	87.0%	
Copper	6010B	38.5	179	146	96.2%	
Lead	6010B	8	536	585	90.3%	
Manganese	6010B	768	879	146	76.0%	H
Mercury	7471A	0.1 U	1.4	1.18	119%	
Nickel	6010B	21	151	146	89.0%	
Selenium	6010B	10 U	550	585	94.0%	
Silver	6010B	0.9 U	142	146	97.3%	
Zinc	6010B	80	208	146	87.7%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

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Sample ID: METHOD BLANK

Lab Sample ID: JO17MB
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/06/06	6010B	07/10/06	7440-70-2	Calcium	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/06/06	6010B	07/10/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/06/06	6010B	07/10/06	7439-92-1	Lead	2	2	U
3050B	07/06/06	6010B	07/10/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/06/06	6010B	07/10/06	7440-02-0	Nickel	1	1	U
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/06/06	6010B	07/10/06	7440-66-6	Zinc	0.6	0.6	U

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: LAB CONTROL

Lab Sample ID: JO17LCS
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	212	200	106%	
Arsenic	6010B	209	200	104%	
Cadmium	6010B	52.1	50.0	104%	
Calcium	6010B	1020	1000	102%	
Chromium	6010B	48.4	50.0	96.8%	
Copper	6010B	50.2	50.0	100%	
Lead	6010B	202	200	101%	
Manganese	6010B	48.2	50.0	96.4%	
Mercury	7471A	1.12	1.00	112%	
Nickel	6010B	49	50	98.0%	
Selenium	6010B	212	200	106%	
Silver	6010B	50.8	50.0	102%	
Zinc	6010B	48.7	50.0	97.4%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

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Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Percent Total Solids: 52.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	9	9	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	9	9	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.4	0.4	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	9	**11,300**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	0.9	**34.4**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.4	**35.2**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	4	**5**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.2	**503**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.07	0.07	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	2	**29**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	9	9	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.5	0.5	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	1	**66**	

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Percent Total Solids: 40.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	10	10	U
3050B	07/06/06	6010B	07/10/06	**7440-38-2**	**Arsenic**	10	**10**	
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.5	0.5	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	10	**9,260**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	1	**39**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.5	**41.6**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	5	**6**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.2	**666**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.09	0.09	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	2	**31**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	10	10	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.7	0.7	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	1	**78**	

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Percent Total Solids: 29.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.6	0.6	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	20	**6,790**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	2	**35**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.6	**39.2**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	6	**8**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.3	**876**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	3	**30**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	1	1	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**73**	

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: IG3-S1
SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Percent Total Solids: 24.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	20	**6,040**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	2	**33**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.8	**39.1**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	8	**9**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.4	**939**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	4	**29**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	1	1	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**76**	

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Percent Total Solids: 24.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	20	**5,780**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	2	**32**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.8	**37.5**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	8	**9**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.4	**1,090**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	4	**29**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	1	1	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**74**	

U-Analyte undetected at given RL
RL-Reporting Limit

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Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Percent Total Solids: 25.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.7	0.7	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	20	**6,630**	
3050B	07/06/06	6010B	07/10/06	**7440-47-3**	**Chromium**	2	**30**	
3050B	07/06/06	6010B	07/10/06	**7440-50-8**	**Copper**	0.7	**39.0**	
3050B	07/06/06	6010B	07/10/06	**7439-92-1**	**Lead**	7	**10**	
3050B	07/06/06	6010B	07/10/06	**7439-96-5**	**Manganese**	0.4	**1,240**	
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/06/06	6010B	07/10/06	**7440-02-0**	**Nickel**	4	**26**	
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	20	20	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	1	1	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	2	**76**	

U-Analyte undetected at given RL
RL-Reporting Limit

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INORGANICS ANALYSIS DATA SHEET
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Sample ID: LAB CONTROL

Lab Sample ID: JO43LCS
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	210	200	105%	
Arsenic	6010B	207	200	104%	
Cadmium	6010B	51.9	50.0	104%	
Calcium	6010B	1020	1000	102%	
Chromium	6010B	48.1	50.0	96.2%	
Copper	6010B	50.3	50.0	101%	
Lead	6010B	200	200	100%	
Manganese	6010B	47.6	50.0	95.2%	
Mercury	7471A	1.09	1.00	109%	
Nickel	6010B	49	50	98.0%	
Selenium	6010B	211	200	106%	
Silver	6010B	50.7	50.0	101%	
Zinc	6010B	48.8	50.0	97.6%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

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TOTAL METALS
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Sample ID: METHOD BLANK

Lab Sample ID: JO43MB
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/06/06	6010B	07/10/06	7440-36-0	Antimony	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-38-2	Arsenic	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/06/06	6010B	07/10/06	**7440-70-2**	**Calcium**	5	**15**	
3050B	07/06/06	6010B	07/10/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/06/06	6010B	07/10/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/06/06	6010B	07/10/06	7439-92-1	Lead	2	2	U
3050B	07/06/06	6010B	07/10/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/06/06	7471A	07/07/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/06/06	6010B	07/10/06	7440-02-0	Nickel	1	1	U
3050B	07/06/06	6010B	07/10/06	7782-49-2	Selenium	5	5	U
3050B	07/06/06	6010B	07/10/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/06/06	6010B	07/10/06	**7440-66-6**	**Zinc**	0.6	**2.4**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-9,S-1
SAMPLE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Percent Total Solids: 23.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	20	**6,930**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	2	**32**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.8	**38.5**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	8	**10**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.4	**665**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	4	**28**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	1	1	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	3	**71**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-9,S-1
DUPLICATE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6010B	20 U	20 U	0.0%	+/- 20	L
Arsenic	6010B	20 U	20 U	0.0%	+/- 20	L
Cadmium	6010B	0.8 U	0.8 U	0.0%	+/- 0.8	L
Calcium	6010B	6,930	7,310	5.3%	+/- 20%	
Chromium	6010B	32	34	6.1%	+/- 20%	
Copper	6010B	38.5	39.5	2.6%	+/- 20%	
Lead	6010B	10	10	0.0%	+/- 8	L
Manganese	6010B	665	687	3.3%	+/- 20%	
Mercury	7471A	0.2 U	0.2 U	0.0%	+/- 0.2	L
Nickel	6010B	28	30	6.9%	+/- 20%	
Selenium	6010B	20 U	20 U	0.0%	+/- 20	L
Silver	6010B	1 U	1 U	0.0%	+/- 1	L
Zinc	6010B	71	81	13.2%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: C-9,S-1
MATRIX SPIKE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6010B	20 U	310	835	37.1%	N
Arsenic	6010B	20 U	810	835	97.0%	
Cadmium	6010B	0.8 U	199	209	95.2%	
Calcium	6010B	6,930	11,000	4,180	97.4%	
Chromium	6010B	32	227	209	93.3%	
Copper	6010B	38.5	244	209	98.3%	
Lead	6010B	10	790	835	93.4%	
Manganese	6010B	665	867	209	96.7%	
Mercury	7471A	0.2 U	1.9	1.68	113%	
Nickel	6010B	28	224	209	93.8%	
Selenium	6010B	20 U	840	835	101%	
Silver	6010B	1 U	202	209	96.7%	
Zinc	6010B	71	274	209	97.1%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-2,S-1
SAMPLE

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Percent Total Solids: 27.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.7	0.7	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	20	**7,670**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	2	**36**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.7	**39.3**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	7	**8**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.4	**345**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	4	**32**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	1	1	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	2	**76**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Percent Total Solids: 23.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	20	**4,660**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	2	**30**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.8	**30.8**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	8	**9**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.4	**718**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	4	**25**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	1	1	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	2	**67**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Percent Total Solids: 25.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.7	0.7	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	20	**5,340**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	2	**32**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.7	**32.5**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	7	**8**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.4	**338**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	4	**27**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	1	1	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	2	**64**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: METHOD BLANK

Lab Sample ID: JP03MB
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	7440-70-2	Calcium	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/17/06	6010B	07/21/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	7439-92-1	Lead	2	2	U
3050B	07/17/06	6010B	07/21/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/17/06	6010B	07/21/06	7440-02-0	Nickel	1	1	U
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/17/06	6010B	07/21/06	7440-66-6	Zinc	0.6	0.6	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
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Sample ID: LAB CONTROL

Lab Sample ID: JP03LCS
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	210	200	105%	
Arsenic	6010B	205	200	102%	
Cadmium	6010B	51.4	50.0	103%	
Calcium	6010B	1020	1000	102%	
Chromium	6010B	49.9	50.0	99.8%	
Copper	6010B	50.4	50.0	101%	
Lead	6010B	203	200	102%	
Manganese	6010B	50.4	50.0	101%	
Mercury	7471A	1.08	1.00	108%	
Nickel	6010B	50	50	100%	
Selenium	6010B	212	200	106%	
Silver	6010B	49.6	50.0	99.2%	
Zinc	6010B	51.0	50.0	102%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-7,S-1
SAMPLE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Percent Total Solids: 72.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	6	6	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	6	6	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.3	0.3	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	6	**9,080**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	0.6	**24.2**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.3	**22.4**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	3	**3**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.1	**213**	
CLP	07/14/06	7471A	07/19/06	**7439-97-6**	**Mercury**	0.05	**0.05**	
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	1	**21**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	6	6	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	0.4	0.4	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	0.8	**57.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: C-7,S-1
DUPLICATE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	6010B	6 U	6 U	0.0%	+/- 6	L
Arsenic	6010B	6 U	7	15.4%	+/- 6	L
Cadmium	6010B	0.3 U	0.3 U	0.0%	+/- 0.3	L
Calcium	6010B	9,080	8,370	8.1%	+/- 20%	
Chromium	6010B	24.2	24.3	0.4%	+/- 20%	
Copper	6010B	22.4	21.4	4.6%	+/- 20%	
Lead	6010B	3	4	28.6%	+/- 3	L
Manganese	6010B	213	203	4.8%	+/- 20%	
Mercury	7471A	0.05	0.05 U	0.0%	+/- 0.05	L
Nickel	6010B	21	21	0.0%	+/- 20%	
Selenium	6010B	6 U	6 U	0.0%	+/- 6	L
Silver	6010B	0.4 U	0.4 U	0.0%	+/- 0.4	L
Zinc	6010B	57.3	52.0	9.7%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: C-7,S-1
MATRIX SPIKE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	6010B	6 U	86	255	33.7%	N
Arsenic	6010B	6 U	226	255	88.6%	
Cadmium	6010B	0.3 U	57.2	63.8	89.7%	
Calcium	6010B	9,080	10,000	1,280	71.9%	H
Chromium	6010B	24.2	78.5	63.8	85.1%	
Copper	6010B	22.4	81.6	63.8	92.8%	
Lead	6010B	3	228	255	88.2%	
Manganese	6010B	213	249	63.8	56.4%	N
Mercury	7471A	0.05	0.60	0.503	109%	
Nickel	6010B	21	75	63.8	84.6%	
Selenium	6010B	6 U	229	255	89.8%	
Silver	6010B	0.4 U	58.0	63.8	90.9%	
Zinc	6010B	57.3	106	63.8	76.3%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-1,S-1
SAMPLE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Percent Total Solids: 82.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	6	6	U
3050B	07/17/06	6010B	07/21/06	**7440-38-2**	**Arsenic**	6	**8**	
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	6	**8,780**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	0.6	**17.2**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.2	**25.3**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	2	**2**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.1	**157**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	1	**16**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	6	6	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	0.7	**38.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-11,S-1
SAMPLE

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Percent Total Solids: 36.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	10	10	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	10	10	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.5	0.5	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	10	**7,480**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	1	**38**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.5	**37.7**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	5	**6**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.3	**354**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.1	0.1	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	3	**32**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	10	10	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	0.8	0.8	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	2	**68**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

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TOTAL METALS
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Sample ID: C-8,S-1
SAMPLE

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Percent Total Solids: 24.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	20	**7,190**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	2	**34**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.8	**36.5**	
3050B	07/17/06	6010B	07/21/06	7439-92-1	Lead	8	8	U
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.4	**341**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	4	**30**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	1	1	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	2	**75**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: C-4,S-1
SAMPLE

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Percent Total Solids: 23.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.8	0.8	U
3050B	07/17/06	6010B	07/21/06	**7440-70-2**	**Calcium**	20	**5,630**	
3050B	07/17/06	6010B	07/21/06	**7440-47-3**	**Chromium**	2	**32**	
3050B	07/17/06	6010B	07/21/06	**7440-50-8**	**Copper**	0.8	**37.1**	
3050B	07/17/06	6010B	07/21/06	**7439-92-1**	**Lead**	8	**9**	
3050B	07/17/06	6010B	07/21/06	**7439-96-5**	**Manganese**	0.4	**451**	
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	**7440-02-0**	**Nickel**	4	**28**	
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	20	20	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	1	1	U
3050B	07/17/06	6010B	07/21/06	**7440-66-6**	**Zinc**	2	**72**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: METHOD BLANK

Lab Sample ID: JP11MB
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	07/17/06	6010B	07/21/06	7440-36-0	Antimony	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-38-2	Arsenic	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-43-9	Cadmium	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	7440-70-2	Calcium	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-47-3	Chromium	0.5	0.5	U
3050B	07/17/06	6010B	07/21/06	7440-50-8	Copper	0.2	0.2	U
3050B	07/17/06	6010B	07/21/06	7439-92-1	Lead	2	2	U
3050B	07/17/06	6010B	07/21/06	7439-96-5	Manganese	0.1	0.1	U
CLP	07/14/06	7471A	07/19/06	7439-97-6	Mercury	0.05	0.05	U
3050B	07/17/06	6010B	07/21/06	7440-02-0	Nickel	1	1	U
3050B	07/17/06	6010B	07/21/06	7782-49-2	Selenium	5	5	U
3050B	07/17/06	6010B	07/21/06	7440-22-4	Silver	0.3	0.3	U
3050B	07/17/06	6010B	07/21/06	7440-66-6	Zinc	0.6	0.6	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: LAB CONTROL

Lab Sample ID: JP11LCS
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	6010B	202	200	101%	
Arsenic	6010B	193	200	96.5%	
Cadmium	6010B	48.5	50.0	97.0%	
Calcium	6010B	979	1000	97.9%	
Chromium	6010B	47.9	50.0	95.8%	
Copper	6010B	47.7	50.0	95.4%	
Lead	6010B	195	200	97.5%	
Manganese	6010B	48.2	50.0	96.4%	
Mercury	7471A	1.05	1.00	105%	
Nickel	6010B	48	50	96.0%	
Selenium	6010B	199	200	99.5%	
Silver	6010B	46.7	50.0	93.4%	
Zinc	6010B	49.2	50.0	98.4%	

Reported in mg/kg-dry

N-Control limit not met
Control Limits: 80-120%

PCBs

ANALYTICAL RESOURCES INCORPORATED

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PSDDA PCB by GC/ECD
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Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 10:14
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 6.6
Percent Moisture: 18.9%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	68.0%
Tetrachlorometaxylene	76.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG6-S1
SAMPLE

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 16:40
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 6.6
Percent Moisture: 67.9%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in μg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	69.8%
Tetrachlorometaxylene	76.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 16:58
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.3
Percent Moisture: 66.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	72.8%
Tetrachlorometaxylene	76.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG2-S1
MS/MSD

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/07/06

Date Analyzed MS: 07/11/06 17:16
MSD: 07/11/06 17:34
Instrument/Analyst MS: ECD5/PK
MSD: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 25.3 g-dry-wt
MSD: 25.3 g-dry-wt
Final Extract Volume MS: 5.0 mL
MSD: 5.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: No
pH: 7.3
Percent Moisture: 66.8%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 19.8 U	74.1	101	73.4%	71.7	101	71.0%	3.3%
Aroclor 1260	< 19.8 U	70.9	101	70.2%	69.2	101	68.5%	2.4%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 17:16
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.3
Percent Moisture: 66.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	---
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	---
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery	
Decachlorobiphenyl	68.2%
Tetrachlorometaxylene	71.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: IG2-S1
MATRIX SPIKE DUP

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 17:34
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.3
Percent Moisture: 66.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	---
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	---
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	66.8%
Tetrachlorometaxylene	70.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 17:52
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.6 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.1
Percent Moisture: 47.3%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	70.8%
Tetrachlorometaxylene	73.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 18:10
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.5 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 6.9
Percent Moisture: 60.4%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in μg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	73.8%
Tetrachlorometaxylene	79.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 18:28
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.3
Percent Moisture: 71.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	67.5%
Tetrachlorometaxylene	66.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: IG3-S1
SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 12:38
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 6.7
Percent Moisture: 75.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	78.5%
Tetrachlorometaxylene	76.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 12:56
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.4
Percent Moisture: 75.6%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in μg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	72.2%
Tetrachlorometaxylene	70.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 13:21
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 7.5
Percent Moisture: 74.5%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	76.2%
Tetrachlorometaxylene	73.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 18:45
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: 6.9
Percent Moisture: 76.1%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	76.2%
Tetrachlorometaxylene	70.5%

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOLIDS SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-070706	71.2%	43-164	77.8%	43-145	0
LCS-070706	70.0%	43-145	81.8%	43-145	0
IG5-S1	68.0%	37-175	76.2%	36-133	0
IG6-S1	69.8%	37-175	76.0%	36-133	0

Prep Method: SW3550B
Log Number Range: 06-11362 to 06-11363

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOLIDS SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-070706	71.2%	43-164	77.8%	43-145	0
LCS-070706	70.0%	43-145	81.8%	43-145	0
IG2-S1	72.8%	37-175	76.8%	36-133	0
IG2-S1 MS	68.2%	37-175	71.5%	36-133	0
IG2-S1 MSD	66.8%	37-175	70.8%	36-133	0

Prep Method: SW3550B
Log Number Range: 06-11567 to 06-11567

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOLIDS SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-070706	71.2%	43-164	77.8%	43-145	0
LCS-070706	70.0%	43-145	81.8%	43-145	0
IG1-S1	70.8%	37-175	73.8%	36-133	0
IG9-S1	73.8%	37-175	79.2%	36-133	0
IG7-S1	67.5%	37-175	66.5%	36-133	0

Prep Method: SW3550B
Log Number Range: 06-11570 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOLIDS SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-070706	71.2%	43-164	77.8%	43-145	0
LCS-070706	70.0%	43-145	81.8%	43-145	0
IG3-S1	78.5%	37-175	76.0%	36-133	0
IG8-S1	72.2%	37-175	70.2%	36-133	0
IG4-S1	76.2%	37-175	73.0%	36-133	0

Prep Method: SW3550B
Log Number Range: 06-11676 to 06-11678

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOLIDS SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-070706	71.2%	43-164	77.8%	43-145	0
LCS-070706	70.0%	43-145	81.8%	43-145	0
C3-S1	76.2%	37-175	70.5%	36-133	0

Prep Method: SW3550B
Log Number Range: 06-11771 to 06-11771

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
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Sample ID: LCS-070706
LAB CONTROL

Lab Sample ID: LCS-070706
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 09:56
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: NA
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	77.8	102	76.3%
Aroclor 1260	76.1	102	74.6%

PCB Surrogate Recovery

Decachlorobiphenyl	70.0%
Tetrachlorometaxylene	81.8%

Results reported in µg/kg (ppb)

4

PCB METHOD BLANK SUMMARY

BLANK NO.

JN72MBS1

Lab Name: ANALYTICAL RESOURCES, INC

Client: G&G

ARI Job No.: JN72

Project: KLAMATH RIVER SEDIME

Lab Sample ID: JN72MBS1

Lab File ID: 0711A003

Date Extracted: 07/07/06

Matrix: SOLID

Date Analyzed: 07/11/06

Instrument ID: ECD5

Time Analyzed: 0938

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	JN72LCSS1	JN72LCSS1	07/11/06
02	IG5-S1	JN72A	07/11/06
03	IG3-S1	JO43A	07/11/06
04	IG8-S1	JO43B	07/11/06
05	IG4-S1	JO43C	07/11/06
06	IG6-S1	JN72B	07/11/06
07	IG2-S1	JO17A	07/11/06
08	IG2-S1 MS	JO17AMS	07/11/06
09	IG2-S1 MSD	JO17AMSD	07/11/06
10	IG1-S1	JO18A	07/11/06
11	IG9-S1	JO18B	07/11/06
12	IG7-S1	JO18C	07/11/06
13	C3-S1	JO60A	07/11/06

ALL RUNS ARE DUAL COLUMN

FORM IV PCB

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA PCB by GC/ECD
Page 1 of 1

Sample ID: MB-070706
METHOD BLANK

Lab Sample ID: MB-070706
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed: 07/11/06 09:38
Instrument/Analyst: ECD5/PK
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No
pH: NA
Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	71.2%
Tetrachlorometaxylene	77.8%

Pesticides

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-9,S-1
SAMPLE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 14:33
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.9%
pH: 7.6

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	28	< 28 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	102%
Triphenyl Phosphate	98.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-2,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 15:00
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 72.8%
pH: 7.1

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	35	< 35 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	109%
Triphenyl Phosphate	130%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-10,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 15:28
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.1%
pH: 7.5

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	28	< 28 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	103%
Triphenyl Phosphate	94.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-5,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 15:55
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 73.4%
pH: 7.2

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	29	< 29 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	100%
Triphenyl Phosphate	99.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-7,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 14:05
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.5 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 28.4%
pH: 7.8

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.8	< 3.8 U
2921-88-2	Chlorpyrifos	3.8	< 3.8 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	110%
Triphenyl Phosphate	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-1,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 12:43
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%
pH: 9.0

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery	
Tributyl Phosphate	91.6%
Triphenyl Phosphate	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-11,S-1
SAMPLE

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 16:23
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.5 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 62.1%
pH: 7.2

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.8	< 3.8 U
2921-88-2	Chlorpyrifos	3.8	< 3.8 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	98.8%
Triphenyl Phosphate	99.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-1,S-1
MATRIX SPIKE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted MS/MSD: 07/20/06

Date Analyzed MS: 07/25/06 13:11
MSD: 07/25/06 13:38
Instrument/Analyst MS: NT2/PK
MSD: NT2/PK

Sample Amount MS: 10.2 g-dry-wt
MSD: 10.5 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diazinon	< 3.9 U	188	294	63.9%	157	286	54.9%	18.0%
Chlorpyrifos	< 3.9 U	231	294	78.6%	219	286	76.6%	5.3%
Dimethoate	< 19.4 U	154	294	52.4%	81.8	286	28.6%	61.2%
Malathion	< 19.4 U	413	294	140%	356	286	124%	14.8%
Methyl Parathion	< 19.4 U	349	294	119%	302	286	106%	14.4%
Fenchlorphos	< 19.4 U	343	294	117%	311	286	109%	9.8%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-1,S-1
MATRIX SPIKE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 13:11
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%
pH: 9.0

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	20	---
121-75-5	Malathion	20	---
298-00-0	Methyl Parathion	20	---
299-84-3	Fenchlorphos	20	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	112%
Triphenyl Phosphate	115%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-1,S-1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 13:38
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.5 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%
pH: 9.0

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.8	---
2921-88-2	Chlorpyrifos	3.8	---
60-51-5	Dimethoate	19	---
121-75-5	Malathion	19	---
298-00-0	Methyl Parathion	19	---
299-84-3	Fenchlorphos	19	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	79.6%
Triphenyl Phosphate	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-8,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 16:50
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 76.0%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	34	< 34 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	101%
Triphenyl Phosphate	112%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C-4,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 17:18
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 74.7%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	31	< 31 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	97.6%
Triphenyl Phosphate	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 17:45
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 67.6%
pH: 6.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	30	< 30 Y
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	113%
Triphenyl Phosphate	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 18:13
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.2%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	111%
Triphenyl Phosphate	118%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-072006	70.0%	100%	0
LCS-072006	101%	94.4%	0
C-9,S-1	102%	98.4%	0
C-2,S-1	109%	130%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-12040 to 06-12041

FORM-II SIM SW8270

Page 1 for JP03

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-072006	70.0%	100%	0
LCS-072006	101%	94.4%	0
C-10,S-1	103%	94.8%	0
C-5,S-1	100%	99.2%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-12051 to 06-12052

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
C-7,S-1	110%	107%	0
MB-072006	70.0%	100%	0
LCS-072006	101%	94.4%	0
C-1,S-1	91.6%	102%	0
C-1,S-1 MS	112%	115%	0
C-1,S-1 MSD	79.6%	102%	0
C-11,S-1	98.8%	99.6%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-12092 to 06-12094

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-072006	70.0%	100%	0
LCS-072006	101%	94.4%	0
C-8,S-1	101%	112%	0
C-4,S-1	97.6%	98.8%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-12109 to 06-12110

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-072006	70.0%	100%	0
LCS-072006	101%	94.4%	0
C-12,S-2C/3C	113%	107%	0
C-6,S-1	111%	118%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-12379 to 06-12380

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: LCS-072006
LAB CONTROL SAMPLE

Lab Sample ID: LCS-072006
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/20/06
Date Analyzed LCS: 07/25/06 12:16
Instrument/Analyst LCS: NT2/PK

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 1.0 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Diazinon	300	300	100%
Chlorpyrifos	315	300	105%
Dimethoate	306	300	102%
Malathion	498	300	166%
Methyl Parathion	337	300	112%
Fenchlorphos	403	300	134%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	101%
Triphenyl Phosphate	94.4%

FORM III

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

JP03MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: G&G

ARI Job No: JP03
Project: KLAMATH RIVER SEDIME

Lab File ID: 072501
Date Extracted: 07/20/06

Instrument ID: NT2
Date Analyzed: 07/25/06

Matrix: SOLID
Time Analyzed: 1149

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	JP03LCSS1	JP03LCSS1	072502	07/25/06
02	C-1,S-1	JP11F	072503	07/25/06
03	C-1,S-1 MS	JP11FMS	072504	07/25/06
04	C-1,S-1 MSD	JP11FMSD	072505	07/25/06
05	C-7,S-1	JP11E	072506	07/25/06
06	C-9,S-1	JP03B	072507	07/25/06
07	C-2,S-1	JP03C	072508	07/25/06
08	C-10,S-1	JP06A	072509	07/25/06
09	C-5,S-1	JP06B	072510	07/25/06
10	C-11,S-1	JP11G	072511	07/25/06
11	C-8,S-1	JP12C	072512	07/25/06
12	C-4,S-1	JP12D	072513	07/25/06
13	C-12,S-2C/3C	JP58C	072514	07/25/06
14	C-6,S-1	JP58D	072515	07/25/06
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COMMENTS:

page 1 of 1

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: MB-072006
METHOD BLANK

Lab Sample ID: MB-072006
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/20/06
Date Analyzed: 07/25/06 11:49
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	70.0%
Triphenyl Phosphate	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 14:40
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 6.6
Percent Moisture: 18.9%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	88.0%
Tetrachlorometaxylene	75.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG6-S1
SAMPLE

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 15:05
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 6.6
Percent Moisture: 67.9%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	71.0%
Tetrachlorometaxylene	61.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 16:43
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.3
Percent Moisture: 66.8%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	**4,4'-DDE**	**2.0**	**1.8 J**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	82.0%
Tetrachlorometaxylene	84.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG2-S1
MS/MSD

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/06/06

Date Analyzed MS: 07/11/06 17:07
MSD: 07/11/06 17:32
Instrument/Analyst MS: ECD4/YZ
MSD: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 25.2 g-dry-wt
MSD: 25.2 g-dry-wt
Final Extract Volume MS: 5.0 mL
MSD: 5.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: Yes
pH: 7.3
Percent Moisture: 66.8%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
gamma-BHC (Lindane)	< 0.990	8.38	9.90	84.6%	6.48	9.90	65.5%	25.6%
Heptachlor	< 0.990	8.93	9.90	90.2%	8.20	9.90	82.8%	8.5%
Aldrin	< 0.990	8.73	9.90	88.2%	7.78	9.90	78.6%	11.5%
Dieldrin	< 1.98	15.9	19.8	80.3%	15.0	19.8	75.8%	5.8%
4,4'-DDT	< 1.98	17.2	19.8	86.9%	16.3	19.8	82.3%	5.4%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 17:07
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.3
Percent Moisture: 66.8%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	---
76-44-8	Heptachlor	0.99	---
309-00-2	Aldrin	0.99	---
60-57-1	Dieldrin	2.0	---
72-55-9	**4,4'-DDE**	**2.0**	**2.9**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	---
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	87.0%
Tetrachlorometaxylene	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG2-S1
MATRIX SPIKE DUP

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 17:32
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.3
Percent Moisture: 66.8%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	---
76-44-8	Heptachlor	0.99	---
309-00-2	Aldrin	0.99	---
60-57-1	Dieldrin	2.0	---
72-55-9	**4,4'-DDE**	**2.0**	**2.6**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	---
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	92.2%
Tetrachlorometaxylene	81.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 15:29
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.1
Percent Moisture: 47.3%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.98	< 0.98 U
76-44-8	Heptachlor	0.98	< 0.98 U
309-00-2	Aldrin	0.98	< 0.98 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.98	< 0.98 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	108%
Tetrachlorometaxylene	81.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 15:54
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.5 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 6.9
Percent Moisture: 60.4%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.98	< 0.98 U
76-44-8	Heptachlor	0.98	< 0.98 U
309-00-2	Aldrin	0.98	< 0.98 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.98	< 0.98 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	80.5%
Tetrachlorometaxylene	62.0%

ANALYTICAL RESOURCES INCORPORATED

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PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 16:18
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.3
Percent Moisture: 71.8%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	83.0%
Tetrachlorometaxylene	71.8%

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
MB-070606	86.5%	74.8%	0
LCS-070606	83.8%	70.8%	0
IG5-S1	88.0%	75.8%	0
IG6-S1	71.0%	61.2%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-11362 to 06-11363

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Client ID	DCBP	TCMX	TOT OUT
MB-070606	86.5%	74.8%	0
LCS-070606	83.8%	70.8%	0
IG2-S1	82.0%	84.2%	0
IG2-S1 MS	87.0%	100%	0
IG2-S1 MSD	92.2%	81.8%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-11567 to 06-11567

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
MB-070606	86.5%	74.8%	0
LCS-070606	83.8%	70.8%	0
IG1-S1	108%	81.5%	0
IG9-S1	80.5%	62.0%	0
IG7-S1	83.0%	71.8%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-11570 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: LCS-070606
LAB CONTROL

Lab Sample ID: LCS-070606
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 14:16
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
gamma-BHC (Lindane)	3.54	4.00	88.5%
Heptachlor	3.88	4.00	97.0%
Aldrin	4.00	4.00	100%
Dieldrin	7.84	8.00	98.0%
4,4'-DDE	7.84	8.00	98.0%
4,4'-DDD	7.82	8.00	97.8%
4,4'-DDT	8.06	8.00	101%
alpha Chlordane	3.70	4.00	92.5%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	83.8%
Tetrachlorometaxylene	70.8%

Reported in µg/kg (ppb)

FORM 4
PESTICIDE METHOD BLANK SUMMARY

SAMPLE NO.

JN72MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: G & G ASSOCIATES

ARI Job No.: JN72
Project: KLAMATH RIVER SEDIMENT

Lab Sample ID: JN72MBS1
Lab File ID: 0711-03R

Matrix (soil/water) SOLID
Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y
Date Extracted: 07/06/06

Date Analyzed (1): 07/11/06
Date Analyzed (2): 07/11/06

Time Analyzed (1): 1351
Time Analyzed (2): 1351

Instrument ID (1): ECD4
Instrument ID (2): ECD4

GC Column (1): RTX-440 ID: 0.53(mm)
GC Column (2): STX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JN72LCSS1	JN72LCSS1	07/11/06	07/11/06
02	IG5-S1	JN72A	07/11/06	07/11/06
03	IG6-S1	JN72B	07/11/06	07/11/06
04	IG1-S1	JO18A	07/11/06	07/11/06
05	IG9-S1	JO18B	07/11/06	07/11/06
06	IG7-S1	JO18C	07/11/06	07/11/06
07	IG2-S1	JO17A	07/11/06	07/11/06
08	IG2-S1 MS	JO17AMS	07/11/06	07/11/06
09	IG2-S1 MSD	JO17AMSD	07/11/06	07/11/06

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FORM IV PEST

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: MB-070606
METHOD BLANK

Lab Sample ID: MB-070606
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/12/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/06/06
Date Analyzed: 07/11/06 13:51
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	86.5%
Tetrachlorometaxylene	74.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG3-S1
SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 16:15
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 6.7
Percent Moisture: 75.5%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	1.6	< 1.6 Y
309-00-2	Aldrin	1.5	< 1.5 Y
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	**4,4'-DDE**	**2.0**	**1.5 J**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	90.0%
Tetrachlorometaxylene	90.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 16:39
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 75.6%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	1.4	< 1.4 Y
309-00-2	Aldrin	1.6	< 1.6 Y
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	**4,4'-DDE**	**2.0**	**1.5 J**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	99.5%
Tetrachlorometaxylene	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 17:04
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.5
Percent Moisture: 74.5%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	1.8	< 1.8 Y
309-00-2	Aldrin	1.9	< 1.9 Y
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	**4,4'-DDE**	**2.0**	**1.4 J**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	84.2%
Tetrachlorometaxylene	90.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG4-S1
MS/MSD

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted MS/MSD: 07/11/06

Date Analyzed MS: 07/12/06 17:28
MSD: 07/12/06 17:53
Instrument/Analyst MS: ECD4/YZ
MSD: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 25.4 g-dry-wt
MSD: 25.3 g-dry-wt
Final Extract Volume MS: 5.0 mL
MSD: 5.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: Yes
pH: 7.5
Percent Moisture: 74.5%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
gamma-BHC (Lindane)	< 0.989	6.39	9.86	64.8%	7.62	9.89	77.0%	17.6%
Heptachlor	< 1.80	8.91	9.86	90.4%	9.42	9.89	95.2%	5.6%
Aldrin	< 1.88	7.41	9.86	75.2%	8.11	9.89	82.0%	9.0%
Dieldrin	< 1.98	13.2	19.7	67.0%	14.1	19.8	71.2%	6.6%
4,4'-DDT	< 1.98	14.9	19.7	75.6%	16.5	19.8	83.3%	10.2%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: IG4-S1
MATRIX SPIKE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 17:28
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.5
Percent Moisture: 74.5%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	---
76-44-8	Heptachlor	0.99	---
309-00-2	Aldrin	0.99	---
60-57-1	Dieldrin	2.0	---
72-55-9	**4,4'-DDE**	**2.0**	**2.2**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	---
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	75.8%
Tetrachlorometaxylene	82.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: IG4-S1
MATRIX SPIKE DUP

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 17:53
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.5
Percent Moisture: 74.5%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	---
76-44-8	Heptachlor	0.99	---
309-00-2	Aldrin	0.99	---
60-57-1	Dieldrin	2.0	---
72-55-9	**4,4'-DDE**	**2.0**	**2.4**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	---
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	78.8%
Tetrachlorometaxylene	86.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 18:17
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 6.9
Percent Moisture: 76.1%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	**4,4'-DDE**	**2.0**	**2.2**
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	99.5%
Tetrachlorometaxylene	78.2%

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

Client ID	DCBP	TCMX	TOT OUT
IG3-S1	90.0%	90.8%	0
IG8-S1	99.5%	98.8%	0
MB-071106	77.0%	64.0%	0
LCS-071106	81.2%	69.8%	0
IG4-S1	84.2%	90.5%	0
IG4-S1 MS	75.8%	82.5%	0
IG4-S1 MSD	78.8%	86.2%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-11676 to 06-11678

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
MB-071106	77.0%	64.0%	0
LCS-071106	81.2%	69.8%	0
C3-S1	99.5%	78.2%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-11771 to 06-11771

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: LCS-071106
LAB CONTROL

Lab Sample ID: LCS-071106
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 15:50
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
gamma-BHC (Lindane)	3.48	4.00	87.0%
Heptachlor	3.80	4.00	95.0%
Aldrin	4.00	4.00	100%
Dieldrin	7.12	8.00	89.0%
4,4'-DDE	7.16	8.00	89.5%
4,4'-DDD	6.62	8.00	82.8%
4,4'-DDT	6.54	8.00	81.8%
alpha Chlordane	3.50	4.00	87.5%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	81.2%
Tetrachlorometaxylene	69.8%

Reported in µg/kg (ppb)

FORM 4
PESTICIDE METHOD BLANK SUMMARY

SAMPLE NO.

JO43MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: G & G ASSOCIATES

ARI Job No.: JO43
Project: KLAMATH RIVER SEDIMENT

Lab Sample ID: JO43MBS1
Lab File ID: 0712-03R

Matrix (soil/water) SOLID
Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y
Date Extracted: 07/11/06

Date Analyzed (1): 07/12/06
Date Analyzed (2): 07/12/06

Time Analyzed (1): 1526
Time Analyzed (2): 1526

Instrument ID (1): ECD4
Instrument ID (2): ECD4

GC Column (1): RTX-440 ID: 0.53(mm)
GC Column (2): STX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JO43LCSS1	JO43LCSS1	07/12/06	07/12/06
02	IG3-S1	JO43A	07/12/06	07/12/06
03	IG8-S1	JO43B	07/12/06	07/12/06
04	IG4-S1	JO43C	07/12/06	07/12/06
05	IG4-S1 MS	JO43CMS	07/12/06	07/12/06
06	IG4-S1 MSD	JO43CMSD	07/12/06	07/12/06
07	C3-S1	JO60A	07/12/06	07/12/06

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FORM IV PEST

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: MB-071106
METHOD BLANK

Lab Sample ID: MB-071106
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/11/06
Date Analyzed: 07/12/06 15:26
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	77.0%
Tetrachlorometaxylene	64.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-9,S-1
SAMPLE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 17:39
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.6
Percent Moisture: 75.9%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	84.2%
Tetrachlorometaxylene	68.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: C-2,S-1
SAMPLE

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 18:04
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.1
Percent Moisture: 72.8%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate	Recovery
Decachlorobiphenyl	93.8%
Tetrachlorometaxylene	82.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 18:28
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.5
Percent Moisture: 75.1%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	89.8%
Tetrachlorometaxylene	86.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 18:53
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.2
Percent Moisture: 73.4%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	86.8%
Tetrachlorometaxylene	78.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-7,S-1
SAMPLE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 19:17
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.8
Percent Moisture: 28.4%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	79.2%
Tetrachlorometaxylene	72.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-1,S-1
SAMPLE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 19:42
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 26.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 9.0
Percent Moisture: 9.0%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.96	< 0.96 U
76-44-8	Heptachlor	0.96	< 0.96 U
309-00-2	Aldrin	0.96	< 0.96 U
60-57-1	Dieldrin	1.9	< 1.9 U
72-55-9	4,4'-DDE	1.9	< 1.9 U
72-54-8	4,4'-DDD	1.9	< 1.9 U
50-29-3	4,4'-DDT	1.9	< 1.9 U
5103-71-9	alpha Chlordane	0.96	< 0.96 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	78.0%
Tetrachlorometaxylene	61.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-11,S-1
SAMPLE

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 20:55
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.2
Percent Moisture: 62.1%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	88.5%
Tetrachlorometaxylene	73.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-1,S-1
MS/MSD

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted MS/MSD: 07/18/06

Date Analyzed MS: 07/21/06 20:06
MSD: 07/21/06 20:31
Instrument/Analyst MS: ECD4/YZ
MSD: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 26.0 g-dry-wt
MSD: 25.9 g-dry-wt
Final Extract Volume MS: 5.0 mL
MSD: 5.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: Yes
pH: 9.0
Percent Moisture: 9.0%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
gamma-BHC (Lindane)	< 0.957	5.36	9.63	55.7%	5.41	9.65	56.1%	0.9%
Heptachlor	< 0.957	7.11	9.63	73.8%	7.20	9.65	74.6%	1.3%
Aldrin	< 0.957	6.94	9.63	72.1%	7.12	9.65	73.8%	2.6%
Dieldrin	< 1.91	13.2	19.3	68.4%	13.1	19.3	67.9%	0.8%
4,4'-DDT	< 1.91	12.5	19.3	64.8%	12.4	19.3	64.2%	0.8%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
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Sample ID: C-1,S-1
MATRIX SPIKE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 20:06
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 26.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 9.0
Percent Moisture: 9.0%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.96	---
76-44-8	Heptachlor	0.96	---
309-00-2	Aldrin	0.96	---
60-57-1	Dieldrin	1.9	---
72-55-9	4,4'-DDE	1.9	< 1.9 U
72-54-8	4,4'-DDD	1.9	< 1.9 U
50-29-3	4,4'-DDT	1.9	---
5103-71-9	alpha Chlordane	0.96	< 0.96 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	78.2%
Tetrachlorometaxylene	60.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: C-1,S-1
MATRIX SPIKE DUP

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 20:31
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.9 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 9.0
Percent Moisture: 9.0%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.96	---
76-44-8	Heptachlor	0.96	---
309-00-2	Aldrin	0.96	---
60-57-1	Dieldrin	1.9	---
72-55-9	4,4'-DDE	1.9	< 1.9 U
72-54-8	4,4'-DDD	1.9	< 1.9 U
50-29-3	4,4'-DDT	1.9	---
5103-71-9	alpha Chlordane	0.96	< 0.96 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	78.5%
Tetrachlorometaxylene	64.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: C-8,S-1
SAMPLE

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 21:19
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 76.0%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	96.2%
Tetrachlorometaxylene	68.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: C-4,S-1
SAMPLE

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 21:44
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 74.7%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	92.2%
Tetrachlorometaxylene	83.0%

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
MB-071806	83.2%	72.0%	0
LCS-071806	84.2%	73.2%	0
C-9,S-1	84.2%	68.2%	0
C-2,S-1	93.8%	82.8%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-12040 to 06-12041

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
MB-071806	83.2%	72.0%	0
LCS-071806	84.2%	73.2%	0
C-10,S-1	89.8%	86.0%	0
C-5,S-1	86.8%	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-12051 to 06-12052

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
C-7,S-1	79.2%	72.8%	0
MB-071806	83.2%	72.0%	0
LCS-071806	84.2%	73.2%	0
C-1,S-1	78.0%	61.5%	0
C-1,S-1 MS	78.2%	60.2%	0
C-1,S-1 MSD	78.5%	64.2%	0
C-11,S-1	88.5%	73.0%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-12092 to 06-12094

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
MB-071806	83.2%	72.0%	0
LCS-071806	84.2%	73.2%	0
C-8,S-1	96.2%	68.8%	0
C-4,S-1	92.2%	83.0%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-12109 to 06-12110

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: LCS-071806
LAB CONTROL

Lab Sample ID: LCS-071806
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 17:15
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
gamma-BHC (Lindane)	3.66	4.00	91.5%
Heptachlor	3.84	4.00	96.0%
Aldrin	4.22	4.00	106%
Dieldrin	7.00	8.00	87.5%
4,4'-DDE	7.10	8.00	88.8%
4,4'-DDD	6.48	8.00	81.0%
4,4'-DDT	6.94	8.00	86.8%
alpha Chlordane	3.52	4.00	88.0%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	84.2%
Tetrachlorometaxylene	73.2%

Reported in µg/kg (ppb)

FORM 4
PESTICIDE METHOD BLANK SUMMARY

SAMPLE NO.

JP03MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: G&G

ARI Job No.: JP03
Project: KLAMATH RIVER SEDIME

Lab Sample ID: JP03MBS1
Lab File ID: 0721-05R

Matrix (soil/water) SOLID
Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y
Date Extracted: 07/18/06

Date Analyzed (1): 07/21/06
Date Analyzed (2): 07/21/06

Time Analyzed (1): 1650
Time Analyzed (2): 1650

Instrument ID (1): ECD4
Instrument ID (2): ECD4

GC Column (1): RTX-440 ID: 0.53(mm)
GC Column (2): STX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JP03LCSS1	JP03LCSS1	07/21/06	07/21/06
02	C-9,S-1	JP03B	07/21/06	07/21/06
03	C-2,S-1	JP03C	07/21/06	07/21/06
04	C-10,S-1	JP06A	07/21/06	07/21/06
05	C-5,S-1	JP06B	07/21/06	07/21/06
06	C-7,S-1	JP11E	07/21/06	07/21/06
07	C-1,S-1	JP11F	07/21/06	07/21/06
08	C-1,S-1 MS	JP11FMS	07/21/06	07/21/06
09	C-1,S-1 MSD	JP11FMSD	07/21/06	07/21/06
10	C-11,S-1	JP11G	07/21/06	07/21/06
11	C-8,S-1	JP12C	07/21/06	07/21/06
12	C-4,S-1	JP12D	07/21/06	07/21/06

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: MB-071806
METHOD BLANK

Lab Sample ID: MB-071806
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 16:50
Instrument/Analyst: ECD4/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	83.2%
Tetrachlorometaxylene	72.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 19:32
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 18.9%
pH: 6.6

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	76.8%
Triphenyl Phosphate	89.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG6-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 13:09
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 67.9%
pH: 6.6

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	93.2%
Triphenyl Phosphate	80.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG2-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 13:37
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	105%
Triphenyl Phosphate	92.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG2-S1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/07/06

Date Analyzed MS: 07/14/06 14:04
MSD: 07/14/06 14:32
Instrument/Analyst MS: NT2/PK
MSD: NT2/PK

Sample Amount MS: 10.3 g-dry-wt
MSD: 10.3 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diazinon	< 3.9 U	254	291	87.3%	261	291	89.7%	2.7%
Chlorpyrifos	< 3.9 U	212	291	72.9%	214	291	73.5%	0.9%
Dimethoate	< 19.4 U	239	291	82.1%	228	291	78.4%	4.7%
Malathion	< 19.4 U	380	291	131%	376	291	129%	1.1%
Methyl Parathion	< 19.4 U	288	291	99.0%	279	291	95.9%	3.2%
Fenchlorphos	< 19.4 U	290	291	99.7%	279	291	95.9%	3.9%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 14:04
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	19	---
121-75-5	Malathion	19	---
298-00-0	Methyl Parathion	19	---
299-84-3	Fenchlorphos	19	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	102%
Triphenyl Phosphate	89.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: IG2-S1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 14:32
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	19	---
121-75-5	Malathion	19	---
298-00-0	Methyl Parathion	19	---
299-84-3	Fenchlorphos	19	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	101%
Triphenyl Phosphate	89.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG1-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 21:49
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 47.3%
pH: 7.1

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	96.0%
Triphenyl Phosphate	88.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG9-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 14:59
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 60.4%
pH: 6.9

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	109%
Triphenyl Phosphate	95.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG7-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 22:43
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 71.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	103%
Triphenyl Phosphate	93.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG3-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO43-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 15:27
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.5%
pH: 6.7

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	109%
Triphenyl Phosphate	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG8-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO43-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 15:54
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.6%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	110%
Triphenyl Phosphate	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C3-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO60-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 16:49
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 76.1%
pH: 6.9

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	107%
Triphenyl Phosphate	101%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG5-S1	76.8%	89.2%	0
IG6-S1	93.2%	80.4%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11362 to 06-11363

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG2-S1	105%	92.4%	0
IG2-S1 MS	102%	89.2%	0
IG2-S1 MSD	101%	89.6%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11567 to 06-11567

FORM-II SIM SW8270

Page 1 for JO17

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG1-S1	96.0%	88.4%	0
IG9-S1	109%	95.6%	0
IG7-S1	103%	93.2%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11570 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG3-S1	109%	100%	0
IG8-S1	110%	102%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11676 to 06-11677

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
C3-S1	107%	101%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11771 to 06-11771

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: LCS-070706
LAB CONTROL SAMPLE

Lab Sample ID: LCS-070706
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed LCS: 07/13/06 19:04
Instrument/Analyst LCS: NT2/PK

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 1.0 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Diazinon	244	300	81.3%
Chlorpyrifos	169	300	56.3%
Dimethoate	186	300	62.0%
Malathion	288	300	96.0%
Methyl Parathion	168	300	56.0%
Fenchlorphos	277	300	92.3%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	59.2%
Triphenyl Phosphate	79.6%

FORM III

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

JN72MBS1

Lab Name: ANALYTICAL RESOURCES, INC

Client: G&G

ARI Job No: JN72

Project: KLAMATH RIVER SEDIME

Lab File ID: 071301

Date Extracted: 07/07/06

Instrument ID: NT2

Date Analyzed: 07/13/06

Matrix: SOLID

Time Analyzed: 1837

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	JN72LCSS1	JN72LCSS1	071302	07/13/06
02	IG5-S1	JN72A	071303	07/13/06
03	IG1-S1	JO18A	071308	07/13/06
04	IG7-S1	JO18C	071310	07/13/06
05	IG6-S1	JN72B	071401	07/14/06
06	IG2-S1	JO17A	071402	07/14/06
07	IG2-S1 MS	JO17AMS	071403	07/14/06
08	IG2-S1 MSD	JO17AMSD	071404	07/14/06
09	IG9-S1	JO18B	071405	07/14/06
10	IG3-S1	JO43A	071406	07/14/06
11	IG8-S1	JO43B	071407	07/14/06
12	IG4-S1	JO43C	071408	07/14/06
13	C3-S1	JO60A	071409	07/14/06
14				
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29				
30				

COMMENTS:

page 1 of 1

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: MB-070706
METHOD BLANK

Lab Sample ID: MB-070706
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 18:37
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	58.4%
Triphenyl Phosphate	80.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 19:32
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 18.9%
pH: 6.6

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	76.8%
Triphenyl Phosphate	89.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG6-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 13:09
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 67.9%
pH: 6.6

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	93.2%
Triphenyl Phosphate	80.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG2-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 13:37
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	105%
Triphenyl Phosphate	92.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG2-S1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/07/06
Date Analyzed MS: 07/14/06 14:04
MSD: 07/14/06 14:32
Instrument/Analyst MS: NT2/PK
MSD: NT2/PK

Sample Amount MS: 10.3 g-dry-wt
MSD: 10.3 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diazinon	< 3.9 U	254	291	87.3%	261	291	89.7%	2.7%
Chlorpyrifos	< 3.9 U	212	291	72.9%	214	291	73.5%	0.9%
Dimethoate	< 19.4 U	239	291	82.1%	228	291	78.4%	4.7%
Malathion	< 19.4 U	380	291	131%	376	291	129%	1.1%
Methyl Parathion	< 19.4 U	288	291	99.0%	279	291	95.9%	3.2%
Fenchlorphos	< 19.4 U	290	291	99.7%	279	291	95.9%	3.9%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG2-S1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 14:04
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	19	---
121-75-5	Malathion	19	---
298-00-0	Methyl Parathion	19	---
299-84-3	Fenchlorphos	19	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	102%
Triphenyl Phosphate	89.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: IG2-S1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 14:32
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	19	---
121-75-5	Malathion	19	---
298-00-0	Methyl Parathion	19	---
299-84-3	Fenchlorphos	19	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	101%
Triphenyl Phosphate	89.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG1-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 21:49
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 47.3%
pH: 7.1

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	96.0%
Triphenyl Phosphate	88.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG9-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 14:59
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.3 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 60.4%
pH: 6.9

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	19	< 19 U
121-75-5	Malathion	19	< 19 U
298-00-0	Methyl Parathion	19	< 19 U
299-84-3	Fenchlorphos	19	< 19 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	109%
Triphenyl Phosphate	95.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG7-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 22:43
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 71.8%
pH: 7.3

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	< 3.9 U
2921-88-2	Chlorpyrifos	3.9	< 3.9 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	103%
Triphenyl Phosphate	93.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG3-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO43-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 15:27
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.5%
pH: 6.7

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	109%
Triphenyl Phosphate	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: IG8-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO43-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
Event: 21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 15:54
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 75.6%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	110%
Triphenyl Phosphate	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: C3-S1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JO60-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 16:49
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 76.1%
pH: 6.9

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	107%
Triphenyl Phosphate	101%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG5-S1	76.8%	89.2%	0
IG6-S1	93.2%	80.4%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11362 to 06-11363

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO17-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG2-S1	105%	92.4%	0
IG2-S1 MS	102%	89.2%	0
IG2-S1 MSD	101%	89.6%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11567 to 06-11567

FORM-II SIM SW8270

Page 1 for JO17

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG1-S1	96.0%	88.4%	0
IG9-S1	109%	95.6%	0
IG7-S1	103%	93.2%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11570 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
IG3-S1	109%	100%	0
IG8-S1	110%	102%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11676 to 06-11677

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	TBLP	TPLP	TOT OUT
MB-070706	58.4%	80.8%	0
LCS-070706	59.2%	79.6%	0
C3-S1	107%	101%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-11771 to 06-11771

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: LCS-070706
LAB CONTROL SAMPLE

Lab Sample ID: LCS-070706
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed LCS: 07/13/06 19:04
Instrument/Analyst LCS: NT2/PK

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 1.0 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Diazinon	244	300	81.3%
Chlorpyrifos	169	300	56.3%
Dimethoate	186	300	62.0%
Malathion	288	300	96.0%
Methyl Parathion	168	300	56.0%
Fenchlorphos	277	300	92.3%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	59.2%
Triphenyl Phosphate	79.6%

FORM III

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

JN72MBS1

Lab Name: ANALYTICAL RESOURCES, INC

Client: G&G

ARI Job No: JN72

Project: KLAMATH RIVER SEDIME

Lab File ID: 071301

Date Extracted: 07/07/06

Instrument ID: NT2

Date Analyzed: 07/13/06

Matrix: SOLID

Time Analyzed: 1837

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	JN72LCSS1	JN72LCSS1	071302	07/13/06
02	IG5-S1	JN72A	071303	07/13/06
03	IG1-S1	JO18A	071308	07/13/06
04	IG7-S1	JO18C	071310	07/13/06
05	IG6-S1	JN72B	071401	07/14/06
06	IG2-S1	JO17A	071402	07/14/06
07	IG2-S1 MS	JO17AMS	071403	07/14/06
08	IG2-S1 MSD	JO17AMSD	071404	07/14/06
09	IG9-S1	JO18B	071405	07/14/06
10	IG3-S1	JO43A	071406	07/14/06
11	IG8-S1	JO43B	071407	07/14/06
12	IG4-S1	JO43C	071408	07/14/06
13	C3-S1	JO60A	071409	07/14/06
14				
15				
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29				
30				

COMMENTS:

page 1 of 1

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: MB-070706**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-070706
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JN72-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 18:37
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	58.4%
Triphenyl Phosphate	80.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 15:57
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 77.1%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	62	< 62 Y
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	110%
Triphenyl Phosphate	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: J-1,S-1**
Page 1 of 1 **DILUTION**

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/31/06 20:43
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 5.00
Percent Moisture: 77.1%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	20	< 20 U
2921-88-2	Chlorpyrifos	20	< 20 U
60-51-5	Dimethoate	99	< 99 U
121-75-5	Malathion	99	< 99 U
298-00-0	Methyl Parathion	99	< 99 U
299-84-3	Fenchlorphos	99	< 99 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	90.0%
Triphenyl Phosphate	71.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: J-3,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 16:25
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 15.6%
pH: 8.1

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	94.8%
Triphenyl Phosphate	94.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: J-5,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 17:47
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 53.9%
pH: 7.7

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	101%
Triphenyl Phosphate	96.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS

Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 18:14
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.1 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 70.2%
pH: 7.4

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	117%
Triphenyl Phosphate	107%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

Client ID	TBLP	TPLP	TOT OUT
J-1,S-1	110%	101%	0
J-1,S-1 DL	90.0%	71.6%	0
MB-072606	50.0%	84.8%	0
LCS-072606	70.8%	99.2%	0
J-3,S-1	94.8%	94.4%	0
J-3,S-1 MS	100%	98.8%	0
J-3,S-1 MSD	90.8%	89.6%	0
J-5,S-1	101%	96.8%	0
J-4,S-1	117%	107%	0

	LCS/MB LIMITS	QC LIMITS
(TBLP) = Tributyl Phosphate	(30-160)	(30-160)
(TPLP) = Triphenyl Phosphate	(30-160)	(30-160)

Prep Method: SW3550B
Log Number Range: 06-12485 to 06-12488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: J-3,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted MS/MSD: 07/26/06

Date Analyzed MS: 07/28/06 16:52
MSD: 07/28/06 17:19
Instrument/Analyst MS: NT2/PK
MSD: NT2/PK

Sample Amount MS: 10.2 g-dry-wt
MSD: 10.2 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 1.00
MSD: 1.00

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diazinon	< 4.0 U	298	294	101%	281	294	95.6%	5.9%
Chlorpyrifos	< 4.0 U	255	294	86.7%	228	294	77.6%	11.2%
Dimethoate	< 19.8 U	312	294	106%	289	294	98.3%	7.7%
Malathion	< 19.8 U	446	294	152%	417	294	142%	6.7%
Methyl Parathion	< 19.8 U	359	294	122%	339	294	115%	5.7%
Fenchlorphos	< 19.8 U	342	294	116%	315	294	107%	8.2%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS **Sample ID: J-3,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 16:52
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 15.6%
pH: 8.1

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	20	---
121-75-5	Malathion	20	---
298-00-0	Methyl Parathion	20	---
299-84-3	Fenchlorphos	20	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	100%
Triphenyl Phosphate	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: J-3,S-1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 17:19
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.2 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: 15.6%
pH: 8.1

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	3.9	---
2921-88-2	Chlorpyrifos	3.9	---
60-51-5	Dimethoate	20	---
121-75-5	Malathion	20	---
298-00-0	Methyl Parathion	20	---
299-84-3	Fenchlorphos	20	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	90.8%
Triphenyl Phosphate	89.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS
Page 1 of 1

Sample ID: LCS-072606
LAB CONTROL SAMPLE

Lab Sample ID: LCS-072606
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Date Extracted: 07/26/06
Date Analyzed LCS: 07/28/06 15:30
Instrument/Analyst LCS: NT2/PK

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 1.0 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Diazinon	271	300	90.3%
Chlorpyrifos	225	300	75.0%
Dimethoate	238	300	79.3%
Malathion	364	300	121%
Methyl Parathion	260	300	86.7%
Fenchlorphos	316	300	105%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	70.8%
Triphenyl Phosphate	99.2%

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
OP Pest by Selected Ion Monitoring GC/MS

Sample ID: MB-072606
METHOD BLANK

Lab Sample ID: MB-072606
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 08/01/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
Event: 21-1-12195-003
Date Sampled: NA
Date Received: NA

Date Extracted: 07/26/06
Date Analyzed: 07/28/06 15:02
Instrument/Analyst: NT2/PK
GPC Cleanup: No
Silica Gel Cleanup: No

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
333-41-5	Diazinon	4.0	< 4.0 U
2921-88-2	Chlorpyrifos	4.0	< 4.0 U
60-51-5	Dimethoate	20	< 20 U
121-75-5	Malathion	20	< 20 U
298-00-0	Methyl Parathion	20	< 20 U
299-84-3	Fenchlorphos	20	< 20 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

Tributyl Phosphate	50.0%
Triphenyl Phosphate	84.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/26/06 23:17
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 6.4
Percent Moisture: 67.6%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	72.5%
Tetrachlorometaxylene	72.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/26/06 23:45
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 75.2%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	81.0%
Tetrachlorometaxylene	78.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 01:11
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 77.1%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	65.2%
Tetrachlorometaxylene	63.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: J-3,S-1
SAMPLE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 01:39
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 8.1
Percent Moisture: 15.6%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.98	< 0.98 U
76-44-8	Heptachlor	0.98	< 0.98 U
309-00-2	Aldrin	0.98	< 0.98 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.98	< 0.98 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	84.5%
Tetrachlorometaxylene	73.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: J-5,S-1
SAMPLE

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized: BB
Reported: 07/28/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 02:08
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.5 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.7
Percent Moisture: 53.9%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.98	< 0.98 U
76-44-8	Heptachlor	0.98	< 0.98 U
309-00-2	Aldrin	0.98	< 0.98 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.98	< 0.98 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	81.2%
Tetrachlorometaxylene	69.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 02:36
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 70.2%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	< 0.99 U
76-44-8	Heptachlor	0.99	< 0.99 U
309-00-2	Aldrin	0.99	< 0.99 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	80.5%
Tetrachlorometaxylene	77.8%

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	DCBP	TCMX	TOT OUT
C-12,S-2C/3C	72.5%	72.5%	0
MB-072506	88.2%	77.0%	0
LCS-072506	83.5%	76.0%	0
C-6,S-1	81.0%	78.2%	0
C-6,S-1 MS	72.8%	61.2%	0
C-6,S-1 MSD	76.2%	76.5%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-12379 to 06-12380

ANALYTICAL RESOURCES INCORPORATED

SW8081 PESTICIDE SOLID SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

Client ID	DCBP	TCMX	TOT OUT
MB-072506	88.2%	77.0%	0
LCS-072506	83.5%	76.0%	0
J-1,S-1	65.2%	63.8%	0
J-3,S-1	84.5%	73.0%	0
J-5,S-1	81.2%	69.5%	0
J-4,S-1	80.5%	77.8%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(60-122)	(44-133)
(TCMX) = Tetrachlorometaxylene	(48-101)	(40-122)

Prep Method: SW3550B
Log Number Range: 06-12485 to 06-12488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: C-6,S-1
MS/MSD

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted MS/MSD: 07/25/06

Date Analyzed MS: 07/27/06 00:14
MSD: 07/27/06 00:42
Instrument/Analyst MS: ECD3/YZ
MSD: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 25.1 g-dry-wt
MSD: 25.1 g-dry-wt
Final Extract Volume MS: 5.0 mL
MSD: 5.0 mL
Dilution Factor MS: 1.00
MSD: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 75.2%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
gamma-BHC (Lindane)	< 0.990	5.39	9.94	54.2%	6.11	9.98	61.2%	12.5%
Heptachlor	< 0.990	7.02	9.94	70.6%	7.92	9.98	79.4%	12.0%
Aldrin	< 0.990	6.62	9.94	66.6%	7.50	9.98	75.2%	12.5%
Dieldrin	< 1.98	13.0	19.9	65.3%	15.3	20.0	76.5%	16.3%
4,4'-DDT	< 1.98	14.5	19.9	72.9%	15.7	20.0	78.5%	7.9%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: C-6,S-1
MATRIX SPIKE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 00:14
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 75.2%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	0.99	---
76-44-8	Heptachlor	0.99	---
309-00-2	Aldrin	0.99	---
60-57-1	Dieldrin	2.0	---
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	---
5103-71-9	alpha Chlordane	0.99	< 0.99 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	72.8%
Tetrachlorometaxylene	61.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD
Page 1 of 1

Sample ID: C-6,S-1
MATRIX SPIKE DUP

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 00:42
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: 7.4
Percent Moisture: 75.2%

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	---
76-44-8	Heptachlor	1.0	---
309-00-2	Aldrin	1.0	---
60-57-1	Dieldrin	2.0	---
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	---
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	76.2%
Tetrachlorometaxylene	76.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/26/06 22:48
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
gamma-BHC (Lindane)	3.64	4.00	91.0%
Heptachlor	3.66	4.00	91.5%
Aldrin	3.46	4.00	86.5%
Dieldrin	7.72	8.00	96.5%
4,4'-DDE	7.28	8.00	91.0%
4,4'-DDD	6.44	8.00	80.5%
4,4'-DDT	7.04	8.00	88.0%
alpha Chlordane	3.94	4.00	98.5%

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	83.5%
Tetrachlorometaxylene	76.0%

Reported in µg/kg (ppb)

FORM 4
PESTICIDE METHOD BLANK SUMMARY

SAMPLE NO.

JP58MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: G & G ASSOCIATES

ARI Job No.: JP58
Project: KLAMATH RIVER SEDIMENT

Lab Sample ID: JP58MBS1
Lab File ID: 0726-25R

Matrix (soil/water) SOLID
Extraction:(SepF/Cont/Sonc) SW3550B

Sulfur Cleanup (Y/N) Y
Date Extracted: 07/25/06

Date Analyzed (1): 07/26/06
Date Analyzed (2): 07/26/06

Time Analyzed (1): 2220
Time Analyzed (2): 2220

Instrument ID (1): ECD3
Instrument ID (2): ECD3

GC Column (1): STX-CLP1 ID: 0.53(mm)
GC Column (2): STX-CLP2 ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JP58LCSS1	JP58LCSS1	07/26/06	07/26/06
02	C-12,S-2C/3C	JP58C	07/26/06	07/26/06
03	C-6,S-1	JP58D	07/26/06	07/26/06
04	C-6,S-1 MS	JP58DMS	07/27/06	07/27/06
05	C-6,S-1 MSD	JP58DMSD	07/27/06	07/27/06
06	J-1,S-1	JP75B	07/27/06	07/27/06
07	J-3,S-1	JP75C	07/27/06	07/27/06
08	J-5,S-1	JP75D	07/27/06	07/27/06
09	J-4,S-1	JP75E	07/27/06	07/27/06

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Pesticides/PCB by GC/ECD

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/28/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/25/06
Date Analyzed: 07/26/06 22:20
Instrument/Analyst: ECD3/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No
Acid Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: Yes
pH: NA
Percent Moisture: NA

CAS Number	Analyte	RL	Result
58-89-9	gamma-BHC (Lindane)	1.0	< 1.0 U
76-44-8	Heptachlor	1.0	< 1.0 U
309-00-2	Aldrin	1.0	< 1.0 U
60-57-1	Dieldrin	2.0	< 2.0 U
72-55-9	4,4'-DDE	2.0	< 2.0 U
72-54-8	4,4'-DDD	2.0	< 2.0 U
50-29-3	4,4'-DDT	2.0	< 2.0 U
5103-71-9	alpha Chlordane	1.0	< 1.0 U

Reported in µg/kg (ppb)

Pest/PCB Surrogate Recovery	
Decachlorobiphenyl	88.2%
Tetrachlorometaxylene	77.0%

Volatiles

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-9,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 17:51

Sample Amount: 1.57 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	Toluene	3.2	< 3.2	U
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.4	< 6.4	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	106%
Bromofluorobenzene	80.0%
d4-1,2-Dichlorobenzene	99.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-9,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 16:14

Sample Amount: 1.50 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U
100-41-4	Ethylbenzene	3.3	< 3.3	U
1330-20-7	Total Xylenes	6.7	< 6.7	U
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	106%
Bromofluorobenzene	80.6%
d4-1,2-Dichlorobenzene	95.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 18:17

Sample Amount: 1.50 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	
100-41-4	**Ethylbenzene**	**3.3**	**43**	
1330-20-7	**Total Xylenes**	**6.6**	**220**	
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.6%
d8-Toluene	104%
Bromofluorobenzene	80.8%
d4-1,2-Dichlorobenzene	97.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 16:40

Sample Amount: 1.51 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U
100-41-4	Ethylbenzene	3.3	< 3.3	U
1330-20-7	Total Xylenes	6.6	< 6.6	U
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	104%
Bromofluorobenzene	73.6%
d4-1,2-Dichlorobenzene	98.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-2,S-1
REANALYSIS

Lab Sample ID: JP03C
LIMS ID: 06-13023
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 17:12

Sample Amount: 1.47 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.4	< 3.4	U
75-35-4	1,1-Dichloroethene	3.4	< 3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	< 3.4	U
67-66-3	Chloroform	3.4	< 3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	< 3.4	U
79-01-6	Trichloroethene	3.4	< 3.4	U
71-43-2	Benzene	3.4	< 3.4	U
127-18-4	Tetrachloroethene	3.4	< 3.4	U
108-88-3	Toluene	3.4	< 3.4	U
100-41-4	Ethylbenzene	3.4	< 3.4	U
1330-20-7	Total Xylenes	6.8	< 6.8	U
95-50-1	1,2-Dichlorobenzene	3.4	< 3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	< 3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	< 3.4	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.4	< 3.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	104%
Bromofluorobenzene	77.9%
d4-1,2-Dichlorobenzene	95.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: JP03F
LIMS ID: 06-12044
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study 21-1-12195-002
Date Sampled: 07/03/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 16:32

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in μg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	113%
Bromofluorobenzene	99.2%
d4-1,2-Dichlorobenzene	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 20:37

Sample Amount: 1.55 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 76.2%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	**Toluene**	**3.2**	**3.7**	
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.5	< 6.5	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	109%
Bromofluorobenzene	77.3%
d4-1,2-Dichlorobenzene	98.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-10,S-1
REANALYSIS

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 18:58

Sample Amount: 1.47 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 76.2%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.4	< 3.4	U
75-35-4	1,1-Dichloroethene	3.4	< 3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	< 3.4	U
67-66-3	Chloroform	3.4	< 3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	< 3.4	U
79-01-6	Trichloroethene	3.4	< 3.4	U
71-43-2	Benzene	3.4	< 3.4	U
127-18-4	Tetrachloroethene	3.4	< 3.4	U
108-88-3	Toluene	3.4	< 3.4	U
100-41-4	Ethylbenzene	3.4	< 3.4	U
1330-20-7	Total Xylenes	6.8	< 6.8	U
95-50-1	1,2-Dichlorobenzene	3.4	< 3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	< 3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	< 3.4	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.4	< 3.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	107%
Bromofluorobenzene	81.0%
d4-1,2-Dichlorobenzene	98.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 21:03

Sample Amount: 1.64 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 74.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.0	< 3.0	U
75-35-4	1,1-Dichloroethene	3.0	< 3.0	U
156-60-5	trans-1,2-Dichloroethene	3.0	< 3.0	U
67-66-3	Chloroform	3.0	< 3.0	U
71-55-6	1,1,1-Trichloroethane	3.0	< 3.0	U
79-01-6	Trichloroethene	3.0	< 3.0	U
71-43-2	Benzene	3.0	< 3.0	U
127-18-4	Tetrachloroethene	3.0	< 3.0	U
108-88-3	Toluene	3.0	< 3.0	U
100-41-4	Ethylbenzene	3.0	< 3.0	U
1330-20-7	Total Xylenes	6.1	< 6.1	U
95-50-1	1,2-Dichlorobenzene	3.0	< 3.0	U
541-73-1	1,3-Dichlorobenzene	3.0	< 3.0	U
106-46-7	1,4-Dichlorobenzene	3.0	< 3.0	U
120-82-1	1,2,4-Trichlorobenzene	15	< 15	U
1634-04-4	Methyl tert-Butyl Ether	3.0	< 3.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	109%
Bromofluorobenzene	77.9%
d4-1,2-Dichlorobenzene	101%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-5,S-1
REANALYSIS

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 19:24

Sample Amount: 1.60 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 74.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.1	< 3.1	U
75-35-4	1,1-Dichloroethene	3.1	< 3.1	U
156-60-5	trans-1,2-Dichloroethene	3.1	< 3.1	U
67-66-3	Chloroform	3.1	< 3.1	U
71-55-6	1,1,1-Trichloroethane	3.1	< 3.1	U
79-01-6	Trichloroethene	3.1	< 3.1	U
71-43-2	Benzene	3.1	< 3.1	U
127-18-4	Tetrachloroethene	3.1	< 3.1	U
108-88-3	Toluene	3.1	< 3.1	U
100-41-4	Ethylbenzene	3.1	< 3.1	U
1330-20-7	Total Xylenes	6.2	< 6.2	U
95-50-1	1,2-Dichlorobenzene	3.1	< 3.1	U
541-73-1	1,3-Dichlorobenzene	3.1	< 3.1	U
106-46-7	1,4-Dichlorobenzene	3.1	< 3.1	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.1	< 3.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	108%
Bromofluorobenzene	80.7%
d4-1,2-Dichlorobenzene	98.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: JP06E
LIMS ID: 06-12055
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 19:44

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in μg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	116%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 19:36

Sample Amount: 3.87 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.3	< 1.3	U
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
67-66-3	Chloroform	1.3	< 1.3	U
71-55-6	1,1,1-Trichloroethane	1.3	< 1.3	U
79-01-6	Trichloroethene	1.3	< 1.3	U
71-43-2	Benzene	1.3	< 1.3	U
127-18-4	Tetrachloroethene	1.3	< 1.3	U
108-88-3	**Toluene**	**1.3**	**440**	**E**
100-41-4	Ethylbenzene	1.3	< 1.3	U
1330-20-7	Total Xylenes	2.6	< 2.6	U
95-50-1	1,2-Dichlorobenzene	1.3	< 1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	< 1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	< 1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.5	< 6.5	U
1634-04-4	Methyl tert-Butyl Ether	1.3	< 1.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	110%
Bromofluorobenzene	85.1%
d4-1,2-Dichlorobenzene	93.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 17:06

Sample Amount: 0.692 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	7.2	< 7.2	U
75-35-4	1,1-Dichloroethene	7.2	< 7.2	U
156-60-5	trans-1,2-Dichloroethene	7.2	< 7.2	U
67-66-3	Chloroform	7.2	< 7.2	U
71-55-6	1,1,1-Trichloroethane	7.2	< 7.2	U
79-01-6	Trichloroethene	7.2	< 7.2	U
71-43-2	Benzene	7.2	< 7.2	U
127-18-4	Tetrachloroethene	7.2	< 7.2	U
108-88-3	**Toluene**	**7.2**	**170**	
100-41-4	Ethylbenzene	7.2	< 7.2	U
1330-20-7	Total Xylenes	14	< 14	U
95-50-1	1,2-Dichlorobenzene	7.2	< 7.2	U
541-73-1	1,3-Dichlorobenzene	7.2	< 7.2	U
106-46-7	1,4-Dichlorobenzene	7.2	< 7.2	U
120-82-1	1,2,4-Trichlorobenzene	36	< 36	U
1634-04-4	Methyl tert-Butyl Ether	7.2	< 7.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	112%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP11E
LIMS ID: 06-13025
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 17:39

Sample Amount: 0.905 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	5.5	< 5.5	U
75-35-4	1,1-Dichloroethene	5.5	< 5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	< 5.5	U
67-66-3	Chloroform	5.5	< 5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	< 5.5	U
79-01-6	Trichloroethene	5.5	< 5.5	U
71-43-2	Benzene	5.5	< 5.5	U
127-18-4	Tetrachloroethene	5.5	< 5.5	U
108-88-3	**Toluene**	**5.5**	**680**	
100-41-4	Ethylbenzene	5.5	< 5.5	U
1330-20-7	Total Xylenes	11	< 11	U
95-50-1	1,2-Dichlorobenzene	5.5	< 5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	< 5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	< 5.5	U
120-82-1	1,2,4-Trichlorobenzene	28	< 28	U
1634-04-4	Methyl tert-Butyl Ether	5.5	< 5.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	114%
Bromofluorobenzene	93.0%
d4-1,2-Dichlorobenzene	101%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-1,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 20:03

Sample Amount: 5.42 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.8%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.9	< 0.9	U
75-35-4	1,1-Dichloroethene	0.9	< 0.9	U
156-60-5	trans-1,2-Dichloroethene	0.9	< 0.9	U
67-66-3	Chloroform	0.9	< 0.9	U
71-55-6	1,1,1-Trichloroethane	0.9	< 0.9	U
79-01-6	Trichloroethene	0.9	< 0.9	U
71-43-2	Benzene	0.9	< 0.9	U
127-18-4	Tetrachloroethene	0.9	< 0.9	U
108-88-3	Toluene	0.9	< 0.9	U
100-41-4	Ethylbenzene	0.9	< 0.9	U
1330-20-7	Total Xylenes	1.8	< 1.8	U
95-50-1	1,2-Dichlorobenzene	0.9	< 0.9	U
541-73-1	1,3-Dichlorobenzene	0.9	< 0.9	U
106-46-7	1,4-Dichlorobenzene	0.9	< 0.9	U
120-82-1	1,2,4-Trichlorobenzene	4.6	< 4.6	U
1634-04-4	Methyl tert-Butyl Ether	0.9	< 0.9	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	112%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-11,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 18:25

Sample Amount: 2.17 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 66.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.3	< 2.3	U
75-35-4	1,1-Dichloroethene	2.3	< 2.3	U
156-60-5	trans-1,2-Dichloroethene	2.3	< 2.3	U
67-66-3	Chloroform	2.3	< 2.3	U
71-55-6	1,1,1-Trichloroethane	2.3	< 2.3	U
79-01-6	Trichloroethene	2.3	< 2.3	U
71-43-2	Benzene	2.3	< 2.3	U
127-18-4	Tetrachloroethene	2.3	< 2.3	U
108-88-3	Toluene	2.3	< 2.3	U
100-41-4	Ethylbenzene	2.3	< 2.3	U
1330-20-7	Total Xylenes	4.6	< 4.6	U
95-50-1	1,2-Dichlorobenzene	2.3	< 2.3	U
541-73-1	1,3-Dichlorobenzene	2.3	< 2.3	U
106-46-7	1,4-Dichlorobenzene	2.3	< 2.3	U
120-82-1	1,2,4-Trichlorobenzene	12	< 12	U
1634-04-4	Methyl tert-Butyl Ether	2.3	< 2.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	104%
Bromofluorobenzene	78.0%
d4-1,2-Dichlorobenzene	99.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-11,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 18:05

Sample Amount: 2.12 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 66.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	< 2.4	U
75-35-4	1,1-Dichloroethene	2.4	< 2.4	U
156-60-5	trans-1,2-Dichloroethene	2.4	< 2.4	U
67-66-3	Chloroform	2.4	< 2.4	U
71-55-6	1,1,1-Trichloroethane	2.4	< 2.4	U
79-01-6	Trichloroethene	2.4	< 2.4	U
71-43-2	Benzene	2.4	< 2.4	U
127-18-4	Tetrachloroethene	2.4	< 2.4	U
108-88-3	Toluene	2.4	< 2.4	U
100-41-4	Ethylbenzene	2.4	< 2.4	U
1330-20-7	Total Xylenes	4.7	< 4.7	U
95-50-1	1,2-Dichlorobenzene	2.4	< 2.4	U
541-73-1	1,3-Dichlorobenzene	2.4	< 2.4	U
106-46-7	1,4-Dichlorobenzene	2.4	< 2.4	U
120-82-1	1,2,4-Trichlorobenzene	12	< 12	U
1634-04-4	Methyl tert-Butyl Ether	2.4	< 2.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	105%
Bromofluorobenzene	79.0%
d4-1,2-Dichlorobenzene	98.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-6**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11H
LIMS ID: 06-12095
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/15/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 16:58

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	112%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	105%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-8,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 20:55

Sample Amount: 1.42 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.1%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.5	< 3.5	U
75-35-4	1,1-Dichloroethene	3.5	< 3.5	U
156-60-5	trans-1,2-Dichloroethene	3.5	< 3.5	U
67-66-3	Chloroform	3.5	< 3.5	U
71-55-6	1,1,1-Trichloroethane	3.5	< 3.5	U
79-01-6	Trichloroethene	3.5	< 3.5	U
71-43-2	Benzene	3.5	< 3.5	U
127-18-4	Tetrachloroethene	3.5	< 3.5	U
108-88-3	Toluene	3.5	< 3.5	U
100-41-4	Ethylbenzene	3.5	< 3.5	U
1330-20-7	Total Xylenes	7.0	< 7.0	U
95-50-1	1,2-Dichlorobenzene	3.5	< 3.5	U
541-73-1	1,3-Dichlorobenzene	3.5	< 3.5	U
106-46-7	1,4-Dichlorobenzene	3.5	< 3.5	U
120-82-1	1,2,4-Trichlorobenzene	18	< 18	U
1634-04-4	Methyl tert-Butyl Ether	3.5	< 3.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.7%
d8-Toluene	107%
Bromofluorobenzene	77.3%
d4-1,2-Dichlorobenzene	97.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-8,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 18:52

Sample Amount: 1.35 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.1%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.7	< 3.7	U
75-35-4	1,1-Dichloroethene	3.7	< 3.7	U
156-60-5	trans-1,2-Dichloroethene	3.7	< 3.7	U
67-66-3	Chloroform	3.7	< 3.7	U
71-55-6	1,1,1-Trichloroethane	3.7	< 3.7	U
79-01-6	Trichloroethene	3.7	< 3.7	U
71-43-2	Benzene	3.7	< 3.7	U
127-18-4	Tetrachloroethene	3.7	< 3.7	U
108-88-3	**Toluene**	**3.7**	**100**	
100-41-4	Ethylbenzene	3.7	< 3.7	U
1330-20-7	Total Xylenes	7.4	< 7.4	U
95-50-1	1,2-Dichlorobenzene	3.7	< 3.7	U
541-73-1	1,3-Dichlorobenzene	3.7	< 3.7	U
106-46-7	1,4-Dichlorobenzene	3.7	< 3.7	U
120-82-1	1,2,4-Trichlorobenzene	18	< 18	U
1634-04-4	Methyl tert-Butyl Ether	3.7	< 3.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	106%
Bromofluorobenzene	83.3%
d4-1,2-Dichlorobenzene	92.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-4,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 19:18

Sample Amount: 1.32 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.8	< 3.8	U
75-35-4	1,1-Dichloroethene	3.8	< 3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	< 3.8	U
67-66-3	Chloroform	3.8	< 3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	< 3.8	U
79-01-6	Trichloroethene	3.8	< 3.8	U
71-43-2	Benzene	3.8	< 3.8	U
127-18-4	Tetrachloroethene	3.8	< 3.8	U
108-88-3	Toluene	3.8	< 3.8	U
100-41-4	Ethylbenzene	3.8	< 3.8	U
1330-20-7	Total Xylenes	7.6	< 7.6	U
95-50-1	1,2-Dichlorobenzene	3.8	< 3.8	U
541-73-1	1,3-Dichlorobenzene	3.8	< 3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	< 3.8	U
120-82-1	1,2,4-Trichlorobenzene	19	< 19	U
1634-04-4	Methyl tert-Butyl Ether	3.8	< 3.8	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	105%
Bromofluorobenzene	76.4%
d4-1,2-Dichlorobenzene	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-4,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP12D
LIMS ID: 06-13024
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 18:31

Sample Amount: 1.34 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.7	< 3.7	U
75-35-4	1,1-Dichloroethene	3.7	< 3.7	U
156-60-5	trans-1,2-Dichloroethene	3.7	< 3.7	U
67-66-3	Chloroform	3.7	< 3.7	U
71-55-6	1,1,1-Trichloroethane	3.7	< 3.7	U
79-01-6	Trichloroethene	3.7	< 3.7	U
71-43-2	Benzene	3.7	< 3.7	U
127-18-4	Tetrachloroethene	3.7	< 3.7	U
108-88-3	Toluene	3.7	< 3.7	U
100-41-4	Ethylbenzene	3.7	< 3.7	U
1330-20-7	Total Xylenes	7.5	< 7.5	U
95-50-1	1,2-Dichlorobenzene	3.7	< 3.7	U
541-73-1	1,3-Dichlorobenzene	3.7	< 3.7	U
106-46-7	1,4-Dichlorobenzene	3.7	< 3.7	U
120-82-1	1,2,4-Trichlorobenzene	19	< 19	U
1634-04-4	Methyl tert-Butyl Ether	3.7	< 3.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	106%
Bromofluorobenzene	81.5%
d4-1,2-Dichlorobenzene	101%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-7**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12E
LIMS ID: 06-12111
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/22/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 17:25

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	112%
Bromofluorobenzene	98.6%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 21:29

Sample Amount: 2.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	< 2.4	U
75-35-4	1,1-Dichloroethene	2.4	< 2.4	U
156-60-5	trans-1,2-Dichloroethene	2.4	< 2.4	U
67-66-3	Chloroform	2.4	< 2.4	U
71-55-6	1,1,1-Trichloroethane	2.4	< 2.4	U
79-01-6	Trichloroethene	2.4	< 2.4	U
71-43-2	Benzene	2.4	< 2.4	U
127-18-4	Tetrachloroethene	2.4	< 2.4	U
108-88-3	Toluene	2.4	< 2.4	U
100-41-4	Ethylbenzene	2.4	< 2.4	U
1330-20-7	Total Xylenes	4.7	< 4.7	U
95-50-1	1,2-Dichlorobenzene	2.4	< 2.4	U
541-73-1	1,3-Dichlorobenzene	2.4	< 2.4	U
106-46-7	1,4-Dichlorobenzene	2.4	< 2.4	U
120-82-1	1,2,4-Trichlorobenzene	12	< 12	U
1634-04-4	Methyl tert-Butyl Ether	2.4	< 2.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.9%
d8-Toluene	106%
Bromofluorobenzene	74.8%
d4-1,2-Dichlorobenzene	93.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
REANALYSIS

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 19:51

Sample Amount: 2.27 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.2	< 2.2	U
75-35-4	1,1-Dichloroethene	2.2	< 2.2	U
156-60-5	trans-1,2-Dichloroethene	2.2	< 2.2	U
67-66-3	Chloroform	2.2	< 2.2	U
71-55-6	1,1,1-Trichloroethane	2.2	< 2.2	U
79-01-6	Trichloroethene	2.2	< 2.2	U
71-43-2	Benzene	2.2	< 2.2	U
127-18-4	Tetrachloroethene	2.2	< 2.2	U
108-88-3	Toluene	2.2	< 2.2	U
100-41-4	Ethylbenzene	2.2	< 2.2	U
1330-20-7	Total Xylenes	4.4	< 4.4	U
95-50-1	1,2-Dichlorobenzene	2.2	< 2.2	U
541-73-1	1,3-Dichlorobenzene	2.2	< 2.2	U
106-46-7	1,4-Dichlorobenzene	2.2	< 2.2	U
120-82-1	1,2,4-Trichlorobenzene	11	< 11	U
1634-04-4	Methyl tert-Butyl Ether	2.2	< 2.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	107%
Bromofluorobenzene	82.7%
d4-1,2-Dichlorobenzene	95.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 22:48

Sample Amount: 1.52 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U
100-41-4	Ethylbenzene	3.3	< 3.3	U
1330-20-7	Total Xylenes	6.6	< 6.6	U
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	109%
Bromofluorobenzene	76.8%
d4-1,2-Dichlorobenzene	97.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-6,S-1
REANALYSIS

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 20:17

Sample Amount: 1.45 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.4	< 3.4	U
75-35-4	1,1-Dichloroethene	3.4	< 3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	< 3.4	U
67-66-3	Chloroform	3.4	< 3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	< 3.4	U
79-01-6	Trichloroethene	3.4	< 3.4	U
71-43-2	Benzene	3.4	< 3.4	U
127-18-4	Tetrachloroethene	3.4	< 3.4	U
108-88-3	Toluene	3.4	< 3.4	U
100-41-4	Ethylbenzene	3.4	< 3.4	U
1330-20-7	Total Xylenes	6.9	< 6.9	U
95-50-1	1,2-Dichlorobenzene	3.4	< 3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	< 3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	< 3.4	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.4	< 3.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	110%
Bromofluorobenzene	81.1%
d4-1,2-Dichlorobenzene	98.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-10**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP58E
LIMS ID: 06-12381
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 20:11

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	116%
Bromofluorobenzene	98.2%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071706	Method Blank	Low	109%	110%	98.0%	102%	0
LCS-071706	Lab Control	Low	101%	109%	104%	98.0%	0
LCSD-071706	Lab Control Dup	Low	104%	111%	102%	94.2%	0
JP03B	C-9,S-1	Low	104%	106%	80.0%	99.4%	0
JP03BRE	C-9,S-1	Low	104%	106%	80.6%	95.9%	0
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP03C	C-2,S-1	Low	98.6%	104%	80.8%	97.1%	0
JP03CRE	C-2,S-1	Low	108%	104%	73.6%	98.8%	0
JP03CMS	C-2,S-1	Low	96.3%	107%	81.9%	91.0%	0
JP03CMSD	C-2,S-1	Low	96.4%	107%	83.2%	91.7%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP03C RE	C-2,S-1	Low	106%	104%	77.9%	95.4%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12040 to 06-13023

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP03F	TRIP BLANK	5	109%	113%	99.2%	102%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12044 to 06-12044

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP06A	C-10,S-1	Low	103%	109%	77.3%	98.6%	0
JP06ARE	C-10,S-1	Low	108%	107%	81.0%	98.6%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP06B	C-5,S-1	Low	112%	109%	77.9%	101%	0
JP06BRE	C-5,S-1	Low	115%	108%	80.7%	98.1%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12051 to 06-12052

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP06E	TRIP BLANK	5	109%	116%	97.2%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12055 to 06-12055

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP11E	C-7,S-1	Low	102%	110%	85.1%	93.8%	0
JP11ERE	C-7,S-1	Low	107%	112%	95.7%	101%	0
JP11EMS	C-7,S-1	Low	105%	117%	105%	97.5%	0
JP11EMSD	C-7,S-1	Low	103%	114%	101%	102%	0
MB-071706	Method Blank	Low	109%	110%	98.0%	102%	0
LCS-071706	Lab Control	Low	101%	109%	104%	98.0%	0
LCSD-071706	Lab Control Dup	Low	104%	111%	102%	94.2%	0
JP11F	C-1,S-1	Low	107%	112%	96.2%	105%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP11G	C-11,S-1	Low	108%	104%	78.0%	99.8%	0
JP11GRE	C-11,S-1	Low	111%	105%	79.0%	98.0%	0
JP11E RE	C-7,S-1	Low	114%	114%	93.0%	101%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12092 to 06-13025

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP11H	TRIP BLANK-6	5	107%	112%	101%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12095 to 06-12095

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071706	Method Blank	Low	109%	110%	98.0%	102%	0
LCS-071706	Lab Control	Low	101%	109%	104%	98.0%	0
LCSD-071706	Lab Control Dup	Low	104%	111%	102%	94.2%	0
JP12C	C-8,S-1	Low	96.7%	107%	77.3%	97.8%	0
JP12CRE	C-8,S-1	Low	106%	106%	83.3%	92.4%	0
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP12D	C-4,S-1	Low	111%	105%	76.4%	98.8%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP12D RE	C-4,S-1	Low	113%	106%	81.5%	101%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12109 to 06-13024

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP12E	TRIP BLANK-7	5	105%	112%	98.6%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12111 to 06-12111

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP58C	C-12,S-2C/3C	Low	99.9%	106%	74.8%	93.3%	0
JP58CRE	C-12,S-2C/3C	Low	111%	107%	82.7%	95.2%	0
JP58CMS	C-12,S-2C/3C	Low	97.8%	111%	80.6%	90.7%	0
JP58CMSD	C-12,S-2C/3C	Low	101%	112%	86.8%	92.2%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP58D	C-6,S-1	Low	107%	109%	76.8%	97.1%	0
JP58DRE	C-6,S-1	Low	112%	110%	81.1%	98.0%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12379 to 06-12380

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP58E	TRIP BLANK-10	5	112%	116%	98.2%	104%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12381 to 06-12381

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/17/06 18:44
MSD: 07/17/06 19:10

Sample Amount MS: 1.51 g-dry-wt
MSD: 1.50 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 77.4%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 3.3 U	232	166	140%	235	167	141%	1.3%
1,1-Dichloroethene	< 3.3 U	216	166	130%	219	167	131%	1.4%
trans-1,2-Dichloroethene	< 3.3 U	172	166	104%	173	167	104%	0.6%
Chloroform	< 3.3 U	179	166	108%	180	167	108%	0.6%
1,1,1-Trichloroethane	< 3.3 U	191	166	115%	190	167	114%	0.5%
Trichloroethene	< 3.3 U	175	166	105%	177	167	106%	1.1%
Benzene	< 3.3 U	166	166	100%	172	167	103%	3.6%
Tetrachloroethene	< 3.3 U	190	166	114%	200	167	120%	5.1%
Toluene	< 3.3 U	172	166	104%	171	167	102%	0.6%
Ethylbenzene	43.1	186	166	86.1%	193	167	89.8%	3.7%
Total Xylenes	220	499	497	56.1%	499	500	55.8%	0.0%
1,2-Dichlorobenzene	< 3.3 U	133	166	80.1%	127	167	76.0%	4.6%
1,3-Dichlorobenzene	< 3.3 U	141	166	84.9%	136	167	81.4%	3.6%
1,4-Dichlorobenzene	< 3.3 U	140	166	84.3%	140	167	83.8%	0.0%
1,2,4-Trichlorobenzene	< 16.6 U	48.8	166	29.4%	48.7	167	29.2%	0.2%
Methyl tert-Butyl Ether	< 3.3 U	138	166	83.1%	142	167	85.0%	2.9%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 18:44

Sample Amount: 1.51 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	---	
75-35-4	1,1-Dichloroethene	3.3	---	
156-60-5	trans-1,2-Dichloroethene	3.3	---	
67-66-3	Chloroform	3.3	---	
71-55-6	1,1,1-Trichloroethane	3.3	---	
79-01-6	Trichloroethene	3.3	---	
71-43-2	Benzene	3.3	---	
127-18-4	Tetrachloroethene	3.3	---	
108-88-3	Toluene	3.3	---	
100-41-4	Ethylbenzene	3.3	---	
1330-20-7	Total Xylenes	6.6	---	
95-50-1	1,2-Dichlorobenzene	3.3	---	
541-73-1	1,3-Dichlorobenzene	3.3	---	
106-46-7	1,4-Dichlorobenzene	3.3	---	
120-82-1	1,2,4-Trichlorobenzene	17	---	
1634-04-4	Methyl tert-Butyl Ether	3.3	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.3%
d8-Toluene	107%
Bromofluorobenzene	81.9%
d4-1,2-Dichlorobenzene	91.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 19:10

Sample Amount: 1.50 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	---	
75-35-4	1,1-Dichloroethene	3.3	---	
156-60-5	trans-1,2-Dichloroethene	3.3	---	
67-66-3	Chloroform	3.3	---	
71-55-6	1,1,1-Trichloroethane	3.3	---	
79-01-6	Trichloroethene	3.3	---	
71-43-2	Benzene	3.3	---	
127-18-4	Tetrachloroethene	3.3	---	
108-88-3	Toluene	3.3	---	
100-41-4	Ethylbenzene	3.3	---	
1330-20-7	Total Xylenes	6.6	---	
95-50-1	1,2-Dichlorobenzene	3.3	---	
541-73-1	1,3-Dichlorobenzene	3.3	---	
106-46-7	1,4-Dichlorobenzene	3.3	---	
120-82-1	1,2,4-Trichlorobenzene	17	---	
1634-04-4	Methyl tert-Butyl Ether	3.3	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.4%
d8-Toluene	107%
Bromofluorobenzene	83.2%
d4-1,2-Dichlorobenzene	91.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/18/06 17:33
MSD: 07/18/06 17:59

Sample Amount MS: 0.633 g-dry-wt
MSD: 0.674 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 40.9%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 1.3 U	352	395	89.1%	320	371	86.3%	9.5%
1,1-Dichloroethene	< 1.3 U	391	395	99.0%	379	371	102%	3.1%
trans-1,2-Dichloroethene	< 1.3 U	390	395	98.7%	375	371	101%	3.9%
Chloroform	< 1.3 U	403	395	102%	389	371	105%	3.5%
1,1,1-Trichloroethane	< 1.3 U	388	395	98.2%	387	371	104%	0.3%
Trichloroethene	< 1.3 U	418	395	106%	399	371	108%	4.7%
Benzene	< 1.3 U	388	395	98.2%	382	371	103%	1.6%
Tetrachloroethene	< 1.3 U	427	395	108%	423	371	114%	0.9%
Toluene	440 E	1150	395	180%	536	371	25.9%	72.8%
Ethylbenzene	< 1.3 U	450	395	114%	436	371	118%	3.2%
Total Xylenes	< 2.6 U	1280	1180	108%	1280	1110	115%	0.0%
1,2-Dichlorobenzene	< 1.3 U	369	395	93.4%	391	371	105%	5.8%
1,3-Dichlorobenzene	< 1.3 U	383	395	97.0%	395	371	106%	3.1%
1,4-Dichlorobenzene	< 1.3 U	388	395	98.2%	398	371	107%	2.5%
1,2,4-Trichlorobenzene	< 6.5 U	262	395	66.3%	332	371	89.5%	23.6%
Methyl tert-Butyl Ether	< 1.3 U	342	395	86.6%	348	371	93.8%	1.7%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 17:33

Sample Amount: 0.633 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	7.9	---	
75-35-4	1,1-Dichloroethene	7.9	---	
156-60-5	trans-1,2-Dichloroethene	7.9	---	
67-66-3	Chloroform	7.9	---	
71-55-6	1,1,1-Trichloroethane	7.9	---	
79-01-6	Trichloroethene	7.9	---	
71-43-2	Benzene	7.9	---	
127-18-4	Tetrachloroethene	7.9	---	
108-88-3	Toluene	7.9	---	
100-41-4	Ethylbenzene	7.9	---	
1330-20-7	Total Xylenes	16	---	
95-50-1	1,2-Dichlorobenzene	7.9	---	
541-73-1	1,3-Dichlorobenzene	7.9	---	
106-46-7	1,4-Dichlorobenzene	7.9	---	
120-82-1	1,2,4-Trichlorobenzene	40	---	
1634-04-4	Methyl tert-Butyl Ether	7.9	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	117%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	97.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 17:59

Sample Amount: 0.674 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	7.4	---	
75-35-4	1,1-Dichloroethene	7.4	---	
156-60-5	trans-1,2-Dichloroethene	7.4	---	
67-66-3	Chloroform	7.4	---	
71-55-6	1,1,1-Trichloroethane	7.4	---	
79-01-6	Trichloroethene	7.4	---	
71-43-2	Benzene	7.4	---	
127-18-4	Tetrachloroethene	7.4	---	
108-88-3	Toluene	7.4	---	
100-41-4	Ethylbenzene	7.4	---	
1330-20-7	Total Xylenes	15	---	
95-50-1	1,2-Dichlorobenzene	7.4	---	
541-73-1	1,3-Dichlorobenzene	7.4	---	
106-46-7	1,4-Dichlorobenzene	7.4	---	
120-82-1	1,2,4-Trichlorobenzene	37	---	
1634-04-4	Methyl tert-Butyl Ether	7.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	114%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
MATRIX SPIKE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/18/06 21:56
MSD: 07/18/06 22:22

Sample Amount MS: 2.11 g-dry-wt
MSD: 2.13 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 64.3%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 2.4 U	153	118	130%	120	117	103%	24.2%
1,1-Dichloroethene	< 2.4 U	143	118	121%	117	117	100%	20.0%
trans-1,2-Dichloroethene	< 2.4 U	99.5	118	84.3%	83.0	117	70.9%	18.1%
Chloroform	< 2.4 U	125	118	106%	102	117	87.2%	20.3%
1,1,1-Trichloroethane	< 2.4 U	132	118	112%	107	117	91.5%	20.9%
Trichloroethene	< 2.4 U	115	118	97.5%	95.7	117	81.8%	18.3%
Benzene	< 2.4 U	118	118	100%	95.8	117	81.9%	20.8%
Tetrachloroethene	< 2.4 U	125	118	106%	105	117	89.7%	17.4%
Toluene	< 2.4 U	119	118	101%	101	117	86.3%	16.4%
Ethylbenzene	< 2.4 U	122	118	103%	99.1	117	84.7%	20.7%
Total Xylenes	< 4.7 U	314	355	88.5%	314	352	89.2%	0.0%
1,2-Dichlorobenzene	< 2.4 U	75.7	118	64.2%	56.4	117	48.2%	29.2%
1,3-Dichlorobenzene	< 2.4 U	78.8	118	66.8%	60.8	117	52.0%	25.8%
1,4-Dichlorobenzene	< 2.4 U	79.6	118	67.5%	59.7	117	51.0%	28.6%
1,2,4-Trichlorobenzene	< 11.7 U	27.5	118	23.3%	21.9	117	18.7%	22.7%
Methyl tert-Butyl Ether	< 2.4 U	94.2	118	79.8%	76.3	117	65.2%	21.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
MATRIX SPIKE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 21:56

Sample Amount: 2.11 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	---	
75-35-4	1,1-Dichloroethene	2.4	---	
156-60-5	trans-1,2-Dichloroethene	2.4	---	
67-66-3	Chloroform	2.4	---	
71-55-6	1,1,1-Trichloroethane	2.4	---	
79-01-6	Trichloroethene	2.4	---	
71-43-2	Benzene	2.4	---	
127-18-4	Tetrachloroethene	2.4	---	
108-88-3	Toluene	2.4	---	
100-41-4	Ethylbenzene	2.4	---	
1330-20-7	Total Xylenes	4.7	---	
95-50-1	1,2-Dichlorobenzene	2.4	---	
541-73-1	1,3-Dichlorobenzene	2.4	---	
106-46-7	1,4-Dichlorobenzene	2.4	---	
120-82-1	1,2,4-Trichlorobenzene	12	---	
1634-04-4	Methyl tert-Butyl Ether	2.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.8%
d8-Toluene	111%
Bromofluorobenzene	80.6%
d4-1,2-Dichlorobenzene	90.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

Sample ID: C-12,S-2C/3C
MATRIX SPIKE DUP

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 22:22

Sample Amount: 2.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	---	
75-35-4	1,1-Dichloroethene	2.4	---	
156-60-5	trans-1,2-Dichloroethene	2.4	---	
67-66-3	Chloroform	2.4	---	
71-55-6	1,1,1-Trichloroethane	2.4	---	
79-01-6	Trichloroethene	2.4	---	
71-43-2	Benzene	2.4	---	
127-18-4	Tetrachloroethene	2.4	---	
108-88-3	Toluene	2.4	---	
100-41-4	Ethylbenzene	2.4	---	
1330-20-7	Total Xylenes	4.7	---	
95-50-1	1,2-Dichlorobenzene	2.4	---	
541-73-1	1,3-Dichlorobenzene	2.4	---	
106-46-7	1,4-Dichlorobenzene	2.4	---	
120-82-1	1,2,4-Trichlorobenzene	12	---	
1634-04-4	Methyl tert-Butyl Ether	2.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	112%
Bromofluorobenzene	86.8%
d4-1,2-Dichlorobenzene	92.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-071706**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-071706
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/17/06 12:38
LCSD: 07/17/06 13:15

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	45.0	50.0	90.0%	44.1	50.0	88.2%	2.0%
1,1-Dichloroethene	52.2	50.0	104%	53.7	50.0	107%	2.8%
trans-1,2-Dichloroethene	52.5	50.0	105%	53.2	50.0	106%	1.3%
Chloroform	53.1	50.0	106%	54.5	50.0	109%	2.6%
1,1,1-Trichloroethane	57.5	50.0	115%	58.6	50.0	117%	1.9%
Trichloroethene	55.9	50.0	112%	56.3	50.0	113%	0.7%
Benzene	49.7	50.0	99.4%	50.3	50.0	101%	1.2%
Tetrachloroethene	56.8	50.0	114%	55.1	50.0	110%	3.0%
Toluene	54.9	50.0	110%	56.3	50.0	113%	2.5%
Ethylbenzene	59.5	50.0	119%	58.3	50.0	117%	2.0%
Total Xylenes	170	150	113%	168	150	112%	1.2%
1,2-Dichlorobenzene	55.6	50.0	111%	52.4	50.0	105%	5.9%
1,3-Dichlorobenzene	57.7	50.0	115%	54.0	50.0	108%	6.6%
1,4-Dichlorobenzene	58.2	50.0	116%	54.7	50.0	109%	6.2%
1,2,4-Trichlorobenzene	63.0	50.0	126%	57.4	50.0	115%	9.3%
Methyl tert-Butyl Ether	51.6	50.0	103%	55.8	50.0	112%	7.8%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	104%
d8-Toluene	109%	111%
Bromofluorobenzene	104%	102%
d4-1,2-Dichlorobenzene	98.0%	94.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-071806**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-071806
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/18/06 13:07
LCSD: 07/18/06 14:37

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	45.8	50.0	91.6%	40.9	50.0	81.8%	11.3%
1,1-Dichloroethene	49.2	50.0	98.4%	47.3	50.0	94.6%	3.9%
trans-1,2-Dichloroethene	51.1	50.0	102%	48.1	50.0	96.2%	6.0%
Chloroform	50.4	50.0	101%	49.8	50.0	99.6%	1.2%
1,1,1-Trichloroethane	51.7	50.0	103%	51.7	50.0	103%	0.0%
Trichloroethene	53.5	50.0	107%	54.2	50.0	108%	1.3%
Benzene	50.9	50.0	102%	48.9	50.0	97.8%	4.0%
Tetrachloroethene	55.4	50.0	111%	55.6	50.0	111%	0.4%
Toluene	55.9	50.0	112%	55.7	50.0	111%	0.4%
Ethylbenzene	57.1	50.0	114%	58.9	50.0	118%	3.1%
Total Xylenes	166	150	111%	167	150	111%	0.6%
1,2-Dichlorobenzene	55.9	50.0	112%	54.7	50.0	109%	2.2%
1,3-Dichlorobenzene	56.8	50.0	114%	56.6	50.0	113%	0.4%
1,4-Dichlorobenzene	57.4	50.0	115%	57.5	50.0	115%	0.2%
1,2,4-Trichlorobenzene	58.8	50.0	118%	58.6	50.0	117%	0.3%
Methyl tert-Butyl Ether	45.8	50.0	91.6%	44.5	50.0	89.0%	2.9%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	102%
d8-Toluene	113%	115%
Bromofluorobenzene	102%	105%
d4-1,2-Dichlorobenzene	104%	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: LCS-071906
LAB CONTROL SAMPLE

Lab Sample ID: LCS-071906
LIMS ID: 06-13023
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/19/06 10:34
LCSD: 07/19/06 11:12

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	50.7	50.0	101%	48.0	50.0	96.0%	5.5%
1,1-Dichloroethene	52.1	50.0	104%	50.1	50.0	100%	3.9%
trans-1,2-Dichloroethene	52.4	50.0	105%	51.6	50.0	103%	1.5%
Chloroform	53.1	50.0	106%	52.4	50.0	105%	1.3%
1,1,1-Trichloroethane	53.4	50.0	107%	51.9	50.0	104%	2.8%
Trichloroethene	56.3	50.0	113%	53.6	50.0	107%	4.9%
Benzene	52.8	50.0	106%	49.6	50.0	99.2%	6.2%
Tetrachloroethene	59.5	50.0	119%	54.6	50.0	109%	8.6%
Toluene	60.4	50.0	121%	56.5	50.0	113%	6.7%
Ethylbenzene	62.2	50.0	124%	58.7	50.0	117%	5.8%
Total Xylenes	178	150	119%	168	150	112%	5.8%
1,2-Dichlorobenzene	60.4	50.0	121%	55.8	50.0	112%	7.9%
1,3-Dichlorobenzene	61.6	50.0	123%	56.4	50.0	113%	8.8%
1,4-Dichlorobenzene	62.4	50.0	125%	56.6	50.0	113%	9.7%
1,2,4-Trichlorobenzene	64.3	50.0	129%	58.2	50.0	116%	10.0%
Methyl tert-Butyl Ether	48.1	50.0	96.2%	49.5	50.0	99.0%	2.9%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	106%
d8-Toluene	114%	115%
Bromofluorobenzene	104%	105%
d4-1,2-Dichlorobenzene	102%	99.9%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0717

Lab Name: ANALYTICAL RESOURCES, INC Contract: G&G

Lab Code: JP90 Case No.: KLAMATH RIVER SEDIME SDG No.: 17JUL06

Lab File ID: MB0717 Lab Sample ID: MB0717

Date Analyzed: 07/17/06 Time Analyzed: 1341

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0717	LCS0717	LCS0717	1238
02	LCS0717	LCS0717	LCS0717A	1315
03	TRIP BLANK	JP03F	JP03F	1632
04	TRIP BLANK-6	JP11H	JP11H	1658
05	TRIP BLANK-7	JP12E	JP12E	1725
06	C-9,S-1	JP03B	JP03B	1751
07	C-2,S-1	JP03C	JP03C	1817
08	C-2,S-1 MS	JP03C MS	JP03CMS	1844
09	C-2,S-1 MSD	JP03C MSD	JP03CMD	1910
10	C-7,S-1	JP11E	JP11E	1936
11	C-1,S-1	JP11F	JP11F	2003
12	C-8,S-1	JP12C	JP12C	2055
13	C-4,S-1	JP12D	JP12D	2122
14				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-071706**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-071706
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 13:41

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	110%
Bromofluorobenzene	98.0%
d4-1,2-Dichlorobenzene	102%

FORM I

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0718

Lab Name: ANALYTICAL RESOURCES, INC Contract: G&G

Lab Code: JP03 Case No.: KLAMATH RIVER SEDIME SDG No.: JP58

Lab File ID: MB0718 Lab Sample ID: MB0718

Date Analyzed: 07/18/06 Time Analyzed: 1411

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0718	LCS0718	LCS0718	1307
02	LCS0718	LCS0718	LCS0718B	1437
03	C-9,S-1	JP03B	JP03B2	1614
04	C-2,S-1	JP03C	JP03C2	1640
05	C-7,S-1	JP11E	JP11E2	1706
06	C-7,S-1 MS	JP11EMS	JP11EMS	1733
07	C-7,S-1 MSD	JP11EMSD	JP11EMD	1759
08	C-11,S-1	JP11G	JP11G2	1825
09	C-8,S-1	JP12C	JP12C2	1852
10	C-4,S-1	JP12D	JP12D2	1918
11	TRIP BLANK	JP06E	JP06E	1944
12	TRIP BLANK-1	JP58E	JP58E	2011
13	C-10,S-1	JP06A	JP06A	2037
14	C-5,S-1	JP06B	JP06B	2103
15	C-12,S-2C/3C	JP58C	JP58C	2129
16	C-12,S-2C/3C	JP58CMS	JP58CMS	2156
17	C-12,S-2C/3C	JP58CMSD	JP58CMD	2222
18	C-6,S-1	JP58D	JP58D	2248
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-071806**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-071806
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 14:11

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	112%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	100%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0719

Lab Name: ANALYTICAL RESOURCES, INC Contract: G&G

Lab Code: JP90 Case No.: KLAMATH RIVER SEDIME SDG No.: JP58

Lab File ID: MB0719 Lab Sample ID: MB0719

Date Analyzed: 07/19/06 Time Analyzed: 1138

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0719	LCS0719	LCS0719	1034
02	LCS0719	LCS0719	LCS0719A	1112
03	C-2,S-1	JP03C	JP03C3	1712
04	C-7,S-1	JP11E	JP11E3	1739
05	C-11,S-1	JP11G	JP11G3	1805
06	C-4,S-1	JP12D	JP12D3	1831
07	C-10,S-1	JP06A	JP06A2	1858
08	C-5,S-1	JP06B	JP06B2	1924
09	C-12,S-2C/3C	JP58C	JP58C2	1951
10	C-6,S-1	JP58D	JP58D2	2017
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COMMENTS:

page 1 of 1

FORM IV VOA OLM3.2M

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: MB-071906
METHOD BLANK

Lab Sample ID: MB-071906
LIMS ID: 06-13023
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 11:38

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	112%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	103%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG5-S1
SAMPLE

Lab Sample ID: JN72A
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/25/06
Date Received: 06/27/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 17:37

Sample Amount: 5.73 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 17.5%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.9	< 0.9	U
75-35-4	1,1-Dichloroethene	0.9	< 0.9	U
156-60-5	trans-1,2-Dichloroethene	0.9	< 0.9	U
67-66-3	Chloroform	0.9	< 0.9	U
71-55-6	1,1,1-Trichloroethane	0.9	< 0.9	U
79-01-6	Trichloroethene	0.9	< 0.9	U
71-43-2	Benzene	0.9	< 0.9	U
127-18-4	Tetrachloroethene	0.9	< 0.9	U
108-88-3	Toluene	0.9	< 0.9	U
100-41-4	Ethylbenzene	0.9	< 0.9	U
1330-20-7	Total Xylenes	1.7	< 1.7	U
95-50-1	1,2-Dichlorobenzene	0.9	< 0.9	U
541-73-1	1,3-Dichlorobenzene	0.9	< 0.9	U
106-46-7	1,4-Dichlorobenzene	0.9	< 0.9	U
120-82-1	1,2,4-Trichlorobenzene	4.4	< 4.4	U
1634-04-4	Methyl tert-Butyl Ether	0.9	< 0.9	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	105%
Bromofluorobenzene	95.4%
d4-1,2-Dichlorobenzene	97.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG6-S1
SAMPLE

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 18:03

Sample Amount: 1.82 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 71.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.7	< 2.7	U
75-35-4	1,1-Dichloroethene	2.7	< 2.7	U
156-60-5	trans-1,2-Dichloroethene	2.7	< 2.7	U
67-66-3	Chloroform	2.7	< 2.7	U
71-55-6	1,1,1-Trichloroethane	2.7	< 2.7	U
79-01-6	Trichloroethene	2.7	< 2.7	U
71-43-2	Benzene	2.7	< 2.7	U
127-18-4	Tetrachloroethene	2.7	< 2.7	U
108-88-3	Toluene	2.7	< 2.7	U
100-41-4	Ethylbenzene	2.7	< 2.7	U
1330-20-7	Total Xylenes	5.5	< 5.5	U
95-50-1	1,2-Dichlorobenzene	2.7	< 2.7	U
541-73-1	1,3-Dichlorobenzene	2.7	< 2.7	U
106-46-7	1,4-Dichlorobenzene	2.7	< 2.7	U
120-82-1	1,2,4-Trichlorobenzene	14	< 14	U
1634-04-4	Methyl tert-Butyl Ether	2.7	< 2.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	102%
Bromofluorobenzene	90.4%
d4-1,2-Dichlorobenzene	97.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG6-S1
REANALYSIS

Lab Sample ID: JN72B
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/23/06
Date Received: 06/27/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 12:34

Sample Amount: 1.82 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 71.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.7	< 2.7	U
75-35-4	1,1-Dichloroethene	2.7	< 2.7	U
156-60-5	trans-1,2-Dichloroethene	2.7	< 2.7	U
67-66-3	Chloroform	2.7	< 2.7	U
71-55-6	1,1,1-Trichloroethane	2.7	< 2.7	U
79-01-6	Trichloroethene	2.7	< 2.7	U
71-43-2	Benzene	2.7	< 2.7	U
127-18-4	Tetrachloroethene	2.7	< 2.7	U
108-88-3	Toluene	2.7	< 2.7	U
100-41-4	Ethylbenzene	2.7	< 2.7	U
1330-20-7	Total Xylenes	5.5	< 5.5	U
95-50-1	1,2-Dichlorobenzene	2.7	< 2.7	U
541-73-1	1,3-Dichlorobenzene	2.7	< 2.7	U
106-46-7	1,4-Dichlorobenzene	2.7	< 2.7	U
120-82-1	1,2,4-Trichlorobenzene	14	< 14	U
1634-04-4	Methyl tert-Butyl Ether	2.7	< 2.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	95.4%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	108%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: Trip Blank SAMPLE**

Lab Sample ID: JN72D
LIMS ID: 06-11365
Matrix: Water
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study 21-1-12195-002
Date Sampled: 06/22/06
Date Received: 06/27/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 15:25

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	104%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	99.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-070506	Method Blank	Low	118%	106%	103%	98.3%	0
LCS-070506	Lab Control	Low	108%	106%	103%	98.8%	0
LCSD-070506	Lab Control Dup	Low	106%	108%	103%	99.7%	0
JN72A	IG5-S1	Low	118%	105%	95.4%	97.3%	0
MB-070706	Method Blank	Low	98.9%	97.5%	105%	105%	0
LCS-070706	Lab Control	Low	91.9%	94.8%	105%	104%	0
LCSD-070706	Lab Control Dup	Low	93.7%	99.0%	108%	109%	0
JN72B	IG6-S1	Low	120%	102%	90.4%	97.2%	0
JN72BRE	IG6-S1	Low	107%	95.4%	101%	108%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-11362 to 06-11363

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JN72D	Trip Blank	5	106%	104%	102%	99.1%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-11365 to 06-11365

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 18:29

Sample Amount: 2.43 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 62.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.1	< 2.1	U
75-35-4	1,1-Dichloroethene	2.1	< 2.1	U
156-60-5	trans-1,2-Dichloroethene	2.1	< 2.1	U
67-66-3	Chloroform	2.1	< 2.1	U
71-55-6	1,1,1-Trichloroethane	2.1	< 2.1	U
79-01-6	Trichloroethene	2.1	< 2.1	U
71-43-2	Benzene	2.1	< 2.1	U
127-18-4	Tetrachloroethene	2.1	< 2.1	U
108-88-3	Toluene	2.1	< 2.1	U
100-41-4	Ethylbenzene	2.1	< 2.1	U
1330-20-7	Total Xylenes	4.1	< 4.1	U
95-50-1	1,2-Dichlorobenzene	2.1	< 2.1	U
541-73-1	1,3-Dichlorobenzene	2.1	< 2.1	U
106-46-7	1,4-Dichlorobenzene	2.1	< 2.1	U
120-82-1	1,2,4-Trichlorobenzene	10	< 10	U
1634-04-4	Methyl tert-Butyl Ether	2.1	< 2.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	102%
Bromofluorobenzene	88.7%
d4-1,2-Dichlorobenzene	95.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG2-S1
REANALYSIS

Lab Sample ID: JO17A
LIMS ID: 06-12023
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 13:00

Sample Amount: 2.37 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 62.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.1	< 2.1	U
75-35-4	1,1-Dichloroethene	2.1	< 2.1	U
156-60-5	trans-1,2-Dichloroethene	2.1	< 2.1	U
67-66-3	Chloroform	2.1	< 2.1	U
71-55-6	1,1,1-Trichloroethane	2.1	< 2.1	U
79-01-6	Trichloroethene	2.1	< 2.1	U
71-43-2	Benzene	2.1	< 2.1	U
127-18-4	Tetrachloroethene	2.1	< 2.1	U
108-88-3	Toluene	2.1	< 2.1	U
100-41-4	Ethylbenzene	2.1	< 2.1	U
1330-20-7	Total Xylenes	4.2	< 4.2	U
95-50-1	1,2-Dichlorobenzene	2.1	< 2.1	U
541-73-1	1,3-Dichlorobenzene	2.1	< 2.1	U
106-46-7	1,4-Dichlorobenzene	2.1	< 2.1	U
120-82-1	1,2,4-Trichlorobenzene	11	< 11	U
1634-04-4	Methyl tert-Butyl Ether	2.1	< 2.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	95.3%
Bromofluorobenzene	92.7%
d4-1,2-Dichlorobenzene	110%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-2**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO17B
LIMS ID: 06-11568
Matrix: Water
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/22/06
Date Received: 06/28/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 15:52

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in μg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	106%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	98.3%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-070506	Method Blank	Low	118%	106%	103%	98.3%	0
LCS-070506	Lab Control	Low	108%	106%	103%	98.8%	0
LCSD-070506	Lab Control Dup	Low	106%	108%	103%	99.7%	0
JO17A	IG2-S1	Low	120%	102%	88.7%	95.4%	0
MB-070706	Method Blank	Low	98.9%	97.5%	105%	105%	0
LCS-070706	Lab Control	Low	91.9%	94.8%	105%	104%	0
LCSD-070706	Lab Control Dup	Low	93.7%	99.0%	108%	109%	0
JO17A RE	IG2-S1	Low	104%	95.3%	92.7%	110%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-11567 to 06-12023

FORM-II VOA
Page 1 for JO17

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JO17B	TRIP BLANK-2	5	114%	106%	105%	98.3%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-11568 to 06-11568

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 18:56

Sample Amount: 3.47 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 44.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.4	< 1.4	U
75-35-4	1,1-Dichloroethene	1.4	< 1.4	U
156-60-5	trans-1,2-Dichloroethene	1.4	< 1.4	U
67-66-3	Chloroform	1.4	< 1.4	U
71-55-6	1,1,1-Trichloroethane	1.4	< 1.4	U
79-01-6	Trichloroethene	1.4	< 1.4	U
71-43-2	Benzene	1.4	< 1.4	U
127-18-4	Tetrachloroethene	1.4	< 1.4	U
108-88-3	Toluene	1.4	< 1.4	U
100-41-4	Ethylbenzene	1.4	< 1.4	U
1330-20-7	Total Xylenes	2.9	< 2.9	U
95-50-1	1,2-Dichlorobenzene	1.4	< 1.4	U
541-73-1	1,3-Dichlorobenzene	1.4	< 1.4	U
106-46-7	1,4-Dichlorobenzene	1.4	< 1.4	U
120-82-1	1,2,4-Trichlorobenzene	7.2	< 7.2	U
1634-04-4	Methyl tert-Butyl Ether	1.4	< 1.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	106%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	95.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 20:15

Sample Amount: 2.30 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 63.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.2	< 2.2	U
75-35-4	1,1-Dichloroethene	2.2	< 2.2	U
156-60-5	trans-1,2-Dichloroethene	2.2	< 2.2	U
67-66-3	Chloroform	2.2	< 2.2	U
71-55-6	1,1,1-Trichloroethane	2.2	< 2.2	U
79-01-6	Trichloroethene	2.2	< 2.2	U
71-43-2	Benzene	2.2	< 2.2	U
127-18-4	Tetrachloroethene	2.2	< 2.2	U
108-88-3	Toluene	2.2	< 2.2	U
100-41-4	Ethylbenzene	2.2	< 2.2	U
1330-20-7	Total Xylenes	4.4	< 4.4	U
95-50-1	1,2-Dichlorobenzene	2.2	< 2.2	U
541-73-1	1,3-Dichlorobenzene	2.2	< 2.2	U
106-46-7	1,4-Dichlorobenzene	2.2	< 2.2	U
120-82-1	1,2,4-Trichlorobenzene	11	< 11	U
1634-04-4	Methyl tert-Butyl Ether	2.2	< 2.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	101%
Bromofluorobenzene	83.9%
d4-1,2-Dichlorobenzene	92.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG9-S1
REANALYSIS

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 13:26

Sample Amount: 2.34 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 63.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.1	< 2.1	U
75-35-4	1,1-Dichloroethene	2.1	< 2.1	U
156-60-5	trans-1,2-Dichloroethene	2.1	< 2.1	U
67-66-3	Chloroform	2.1	< 2.1	U
71-55-6	1,1,1-Trichloroethane	2.1	< 2.1	U
79-01-6	Trichloroethene	2.1	< 2.1	U
71-43-2	Benzene	2.1	< 2.1	U
127-18-4	Tetrachloroethene	2.1	< 2.1	U
108-88-3	Toluene	2.1	< 2.1	U
100-41-4	Ethylbenzene	2.1	< 2.1	U
1330-20-7	Total Xylenes	4.3	< 4.3	U
95-50-1	1,2-Dichlorobenzene	2.1	< 2.1	U
541-73-1	1,3-Dichlorobenzene	2.1	< 2.1	U
106-46-7	1,4-Dichlorobenzene	2.1	< 2.1	U
120-82-1	1,2,4-Trichlorobenzene	11	< 11	U
1634-04-4	Methyl tert-Butyl Ether	2.1	< 2.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	93.2%
Bromofluorobenzene	84.9%
d4-1,2-Dichlorobenzene	101%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 20:41

Sample Amount: 1.55 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 75.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	Toluene	3.2	< 3.2	U
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.4	< 6.4	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	101%
Bromofluorobenzene	86.0%
d4-1,2-Dichlorobenzene	95.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG7-S1
REANALYSIS

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 13:53

Sample Amount: 1.56 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 75.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	Toluene	3.2	< 3.2	U
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.4	< 6.4	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	94.9%
Bromofluorobenzene	89.2%
d4-1,2-Dichlorobenzene	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-3**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO18E
LIMS ID: 06-11574
Matrix: Water
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/22/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 16:18

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	119%
d8-Toluene	108%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	97.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-070506	Method Blank	Low	118%	106%	103%	98.3%	0
LCS-070506	Lab Control	Low	108%	106%	103%	98.8%	0
LCSD-070506	Lab Control Dup	Low	106%	108%	103%	99.7%	0
JO18A	IG1-S1	Low	124%	106%	102%	95.9%	0
JO18AMS	IG1-S1	Low	112%	107%	99.7%	98.0%	0
JO18AMSD	IG1-S1	Low	107%	105%	95.2%	98.1%	0
MB-070706	Method Blank	Low	98.9%	97.5%	105%	105%	0
LCS-070706	Lab Control	Low	91.9%	94.8%	105%	104%	0
LCSD-070706	Lab Control Dup	Low	93.7%	99.0%	108%	109%	0
JO18B	IG9-S1	Low	116%	101%	83.9%	92.9%	0
JO18BRE	IG9-S1	Low	108%	93.2%	84.9%	101%	0
JO18C	IG7-S1	Low	124%	101%	86.0%	95.9%	0
JO18CRE	IG7-S1	Low	112%	94.9%	89.2%	102%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-11570 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JO18E	TRIP BLANK-3	5	119%	108%	103%	97.6%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-11574 to 06-11574

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG1-S1
MATRIX SPIKE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/05/06 19:22
MSD: 07/05/06 19:48

Sample Amount MS: 3.58 g-dry-wt
MSD: 3.60 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 44.0%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 1.4 U	102	69.8	146%	97.0	69.4	140%	5.0%
1,1-Dichloroethene	< 1.4 U	74.4	69.8	107%	76.2	69.4	110%	2.4%
trans-1,2-Dichloroethene	< 1.4 U	70.3	69.8	101%	70.0	69.4	101%	0.4%
Chloroform	< 1.4 U	73.5	69.8	105%	71.5	69.4	103%	2.8%
1,1,1-Trichloroethane	< 1.4 U	76.0	69.8	109%	73.7	69.4	106%	3.1%
Trichloroethene	< 1.4 U	69.7	69.8	99.9%	68.0	69.4	98.0%	2.5%
Benzene	< 1.4 U	70.6	69.8	101%	70.0	69.4	101%	0.9%
Tetrachloroethene	< 1.4 U	70.3	69.8	101%	70.4	69.4	101%	0.1%
Toluene	< 1.4 U	69.8	69.8	100%	67.2	69.4	96.8%	3.8%
Ethylbenzene	< 1.4 U	64.8	69.8	92.8%	63.8	69.4	91.9%	1.6%
Total Xylenes	< 2.9 U	209	209	100%	209	208	100%	0.0%
1,2-Dichlorobenzene	< 1.4 U	58.1	69.8	83.2%	55.6	69.4	80.1%	4.4%
1,3-Dichlorobenzene	< 1.4 U	61.3	69.8	87.8%	58.3	69.4	84.0%	5.0%
1,4-Dichlorobenzene	< 1.4 U	59.1	69.8	84.7%	56.9	69.4	82.0%	3.8%
1,2,4-Trichlorobenzene	< 7.2 U	43.9	69.8	62.9%	33.6	69.4	48.4%	26.6%
Methyl tert-Butyl Ether	< 1.4 U	65.8	69.8	94.3%	66.7	69.4	96.1%	1.4%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG1-S1
MATRIX SPIKE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 19:22

Sample Amount: 3.58 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 44.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.4	---	
75-35-4	1,1-Dichloroethene	1.4	---	
156-60-5	trans-1,2-Dichloroethene	1.4	---	
67-66-3	Chloroform	1.4	---	
71-55-6	1,1,1-Trichloroethane	1.4	---	
79-01-6	Trichloroethene	1.4	---	
71-43-2	Benzene	1.4	---	
127-18-4	Tetrachloroethene	1.4	---	
108-88-3	Toluene	1.4	---	
100-41-4	Ethylbenzene	1.4	---	
1330-20-7	Total Xylenes	2.8	---	
95-50-1	1,2-Dichlorobenzene	1.4	---	
541-73-1	1,3-Dichlorobenzene	1.4	---	
106-46-7	1,4-Dichlorobenzene	1.4	---	
120-82-1	1,2,4-Trichlorobenzene	7.0	---	
1634-04-4	Methyl tert-Butyl Ether	1.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	107%
Bromofluorobenzene	99.7%
d4-1,2-Dichlorobenzene	98.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: IG1-S1
MATRIX SPIKE DUP

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 19:48

Sample Amount: 3.60 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 44.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.4	---	
75-35-4	1,1-Dichloroethene	1.4	---	
156-60-5	trans-1,2-Dichloroethene	1.4	---	
67-66-3	Chloroform	1.4	---	
71-55-6	1,1,1-Trichloroethane	1.4	---	
79-01-6	Trichloroethene	1.4	---	
71-43-2	Benzene	1.4	---	
127-18-4	Tetrachloroethene	1.4	---	
108-88-3	Toluene	1.4	---	
100-41-4	Ethylbenzene	1.4	---	
1330-20-7	Total Xylenes	2.8	---	
95-50-1	1,2-Dichlorobenzene	1.4	---	
541-73-1	1,3-Dichlorobenzene	1.4	---	
106-46-7	1,4-Dichlorobenzene	1.4	---	
120-82-1	1,2,4-Trichlorobenzene	6.9	---	
1634-04-4	Methyl tert-Butyl Ether	1.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	105%
Bromofluorobenzene	95.2%
d4-1,2-Dichlorobenzene	98.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG3-S1
SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 21:34

Sample Amount: 1.60 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 74.5%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.1	< 3.1	U
75-35-4	1,1-Dichloroethene	3.1	< 3.1	U
156-60-5	trans-1,2-Dichloroethene	3.1	< 3.1	U
67-66-3	Chloroform	3.1	< 3.1	U
71-55-6	1,1,1-Trichloroethane	3.1	< 3.1	U
79-01-6	Trichloroethene	3.1	< 3.1	U
71-43-2	Benzene	3.1	< 3.1	U
127-18-4	Tetrachloroethene	3.1	< 3.1	U
108-88-3	Toluene	3.1	< 3.1	U
100-41-4	Ethylbenzene	3.1	< 3.1	U
1330-20-7	Total Xylenes	6.3	< 6.3	U
95-50-1	1,2-Dichlorobenzene	3.1	< 3.1	U
541-73-1	1,3-Dichlorobenzene	3.1	< 3.1	U
106-46-7	1,4-Dichlorobenzene	3.1	< 3.1	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.1	< 3.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	128%
d8-Toluene	102%
Bromofluorobenzene	85.6%
d4-1,2-Dichlorobenzene	94.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG3-S1
REANALYSIS

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 14:19

Sample Amount: 1.68 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 74.5%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.0	< 3.0	U
75-35-4	1,1-Dichloroethene	3.0	< 3.0	U
156-60-5	trans-1,2-Dichloroethene	3.0	< 3.0	U
67-66-3	Chloroform	3.0	< 3.0	U
71-55-6	1,1,1-Trichloroethane	3.0	< 3.0	U
79-01-6	Trichloroethene	3.0	< 3.0	U
71-43-2	Benzene	3.0	< 3.0	U
127-18-4	Tetrachloroethene	3.0	< 3.0	U
108-88-3	Toluene	3.0	< 3.0	U
100-41-4	Ethylbenzene	3.0	< 3.0	U
1330-20-7	Total Xylenes	6.0	< 6.0	U
95-50-1	1,2-Dichlorobenzene	3.0	< 3.0	U
541-73-1	1,3-Dichlorobenzene	3.0	< 3.0	U
106-46-7	1,4-Dichlorobenzene	3.0	< 3.0	U
120-82-1	1,2,4-Trichlorobenzene	15	< 15	U
1634-04-4	Methyl tert-Butyl Ether	3.0	< 3.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	96.8%
Bromofluorobenzene	93.7%
d4-1,2-Dichlorobenzene	99.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 22:00

Sample Amount: 1.60 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 75.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.1	< 3.1	U
75-35-4	1,1-Dichloroethene	3.1	< 3.1	U
156-60-5	trans-1,2-Dichloroethene	3.1	< 3.1	U
67-66-3	Chloroform	3.1	< 3.1	U
71-55-6	1,1,1-Trichloroethane	3.1	< 3.1	U
79-01-6	Trichloroethene	3.1	< 3.1	U
71-43-2	Benzene	3.1	< 3.1	U
127-18-4	Tetrachloroethene	3.1	< 3.1	U
108-88-3	Toluene	3.1	< 3.1	U
100-41-4	Ethylbenzene	3.1	< 3.1	U
1330-20-7	Total Xylenes	6.3	< 6.3	U
95-50-1	1,2-Dichlorobenzene	3.1	< 3.1	U
541-73-1	1,3-Dichlorobenzene	3.1	< 3.1	U
106-46-7	1,4-Dichlorobenzene	3.1	< 3.1	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.1	< 3.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	124%
d8-Toluene	105%
Bromofluorobenzene	92.5%
d4-1,2-Dichlorobenzene	94.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG8-S1
REANALYSIS

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 14:45

Sample Amount: 1.55 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 75.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	Toluene	3.2	< 3.2	U
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.5	< 6.5	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	94.0%
Bromofluorobenzene	91.2%
d4-1,2-Dichlorobenzene	104%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 22:26

Sample Amount: 1.95 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 69.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.6	< 2.6	U
75-35-4	1,1-Dichloroethene	2.6	< 2.6	U
156-60-5	trans-1,2-Dichloroethene	2.6	< 2.6	U
67-66-3	Chloroform	2.6	< 2.6	U
71-55-6	1,1,1-Trichloroethane	2.6	< 2.6	U
79-01-6	Trichloroethene	2.6	< 2.6	U
71-43-2	Benzene	2.6	< 2.6	U
127-18-4	Tetrachloroethene	2.6	< 2.6	U
108-88-3	Toluene	2.6	< 2.6	U
100-41-4	Ethylbenzene	2.6	< 2.6	U
1330-20-7	Total Xylenes	5.1	< 5.1	U
95-50-1	1,2-Dichlorobenzene	2.6	< 2.6	U
541-73-1	1,3-Dichlorobenzene	2.6	< 2.6	U
106-46-7	1,4-Dichlorobenzene	2.6	< 2.6	U
120-82-1	1,2,4-Trichlorobenzene	13	< 13	U
1634-04-4	Methyl tert-Butyl Ether	2.6	< 2.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	132%
d8-Toluene	102%
Bromofluorobenzene	90.9%
d4-1,2-Dichlorobenzene	94.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: IG4-S1
REANALYSIS

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 15:12

Sample Amount: 1.92 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 69.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.6	< 2.6	U
75-35-4	1,1-Dichloroethene	2.6	< 2.6	U
156-60-5	trans-1,2-Dichloroethene	2.6	< 2.6	U
67-66-3	Chloroform	2.6	< 2.6	U
71-55-6	1,1,1-Trichloroethane	2.6	< 2.6	U
79-01-6	Trichloroethene	2.6	< 2.6	U
71-43-2	Benzene	2.6	< 2.6	U
127-18-4	Tetrachloroethene	2.6	< 2.6	U
108-88-3	Toluene	2.6	< 2.6	U
100-41-4	Ethylbenzene	2.6	< 2.6	U
1330-20-7	Total Xylenes	5.2	< 5.2	U
95-50-1	1,2-Dichlorobenzene	2.6	< 2.6	U
541-73-1	1,3-Dichlorobenzene	2.6	< 2.6	U
106-46-7	1,4-Dichlorobenzene	2.6	< 2.6	U
120-82-1	1,2,4-Trichlorobenzene	13	< 13	U
1634-04-4	Methyl tert-Butyl Ether	2.6	< 2.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	94.9%
Bromofluorobenzene	95.6%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: JO43E
LIMS ID: 06-11680
Matrix: Water
Data Release Authorized:
Reported: 07/11/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY 21-12195-002
Date Sampled: 06/15/06
Date Received: 06/30/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 21:07

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	130%
d8-Toluene	108%
Bromofluorobenzene	104%
d4-1,2-Dichlorobenzene	100%

FORM I

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-070506	Method Blank	Low	118%	106%	103%	98.3%	0
LCS-070506	Lab Control	Low	108%	106%	103%	98.8%	0
LCSD-070506	Lab Control Dup	Low	106%	108%	103%	99.7%	0
JO43A	IG3-S1	Low	128%	102%	85.6%	94.2%	0
JO43ARE	IG3-S1	Low	114%	96.8%	93.7%	99.8%	0
MB-070706	Method Blank	Low	98.9%	97.5%	105%	105%	0
LCS-070706	Lab Control	Low	91.9%	94.8%	105%	104%	0
LCSD-070706	Lab Control Dup	Low	93.7%	99.0%	108%	109%	0
JO43B	IG8-S1	Low	124%	105%	92.5%	94.2%	0
JO43BRE	IG8-S1	Low	112%	94.0%	91.2%	104%	0
JO43C	IG4-S1	Low	132%	102%	90.9%	94.5%	0
JO43CRE	IG4-S1	Low	114%	94.9%	95.6%	102%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-11676 to 06-11678

FORM-II VOA
Page 1 for JO43

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JO43E	TRIP BLANK	5	130%	108%	104%	100%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-11680 to 06-11680

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: LCS-070506
LAB CONTROL SAMPLE

Lab Sample ID: LCS-070506
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/05/06 13:09
LCSD: 07/05/06 13:47

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	59.3	50.0	119%	55.6	50.0	111%	6.4%
1,1-Dichloroethene	48.5	50.0	97.0%	48.4	50.0	96.8%	0.2%
trans-1,2-Dichloroethene	47.7	50.0	95.4%	48.5	50.0	97.0%	1.7%
Chloroform	50.0	50.0	100%	48.8	50.0	97.6%	2.4%
1,1,1-Trichloroethane	51.1	50.0	102%	50.6	50.0	101%	1.0%
Trichloroethene	49.1	50.0	98.2%	50.1	50.0	100%	2.0%
Benzene	49.4	50.0	98.8%	50.4	50.0	101%	2.0%
Tetrachloroethene	49.8	50.0	99.6%	49.2	50.0	98.4%	1.2%
Toluene	49.3	50.0	98.6%	50.2	50.0	100%	1.8%
Ethylbenzene	45.1	50.0	90.2%	45.0	50.0	90.0%	0.2%
Total Xylenes	152	150	101%	150	150	100%	1.3%
1,2-Dichlorobenzene	49.3	50.0	98.6%	48.7	50.0	97.4%	1.2%
1,3-Dichlorobenzene	51.4	50.0	103%	50.1	50.0	100%	2.6%
1,4-Dichlorobenzene	50.0	50.0	100%	49.5	50.0	99.0%	1.0%
1,2,4-Trichlorobenzene	54.3	50.0	109%	51.5	50.0	103%	5.3%
Methyl tert-Butyl Ether	47.1	50.0	94.2%	48.7	50.0	97.4%	3.3%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	108%	106%
d8-Toluene	106%	108%
Bromofluorobenzene	103%	103%
d4-1,2-Dichlorobenzene	98.8%	99.7%

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ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: LCS-070706
LAB CONTROL SAMPLE

Lab Sample ID: LCS-070706
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/07/06 09:53
LCSD: 07/07/06 10:30

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	53.1	50.0	106%	50.1	50.0	100%	5.8%
1,1-Dichloroethene	56.2	50.0	112%	55.3	50.0	111%	1.6%
trans-1,2-Dichloroethene	55.8	50.0	112%	55.2	50.0	110%	1.1%
Chloroform	53.9	50.0	108%	52.8	50.0	106%	2.1%
1,1,1-Trichloroethane	56.0	50.0	112%	54.1	50.0	108%	3.5%
Trichloroethene	54.9	50.0	110%	54.4	50.0	109%	0.9%
Benzene	56.2	50.0	112%	56.9	50.0	114%	1.2%
Tetrachloroethene	58.8	50.0	118%	55.7	50.0	111%	5.4%
Toluene	57.3	50.0	115%	57.0	50.0	114%	0.5%
Ethylbenzene	57.8	50.0	116%	56.2	50.0	112%	2.8%
Total Xylenes	176	150	117%	170	150	113%	3.5%
1,2-Dichlorobenzene	58.9	50.0	118%	56.8	50.0	114%	3.6%
1,3-Dichlorobenzene	61.6	50.0	123%	58.0	50.0	116%	6.0%
1,4-Dichlorobenzene	60.6	50.0	121%	57.4	50.0	115%	5.4%
1,2,4-Trichlorobenzene	62.9	50.0	126%	60.0	50.0	120%	4.7%
Methyl tert-Butyl Ether	53.4	50.0	107%	55.0	50.0	110%	3.0%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	91.9%	93.7%
d8-Toluene	94.8%	99.0%
Bromofluorobenzene	105%	108%
d4-1,2-Dichlorobenzene	104%	109%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0705

Lab Name: ANALYTICAL RESOURCES, INC Contract: G & G

Lab Code: ARI Case No.: KLAMATH RIVER SDG No.: JO43

Lab File ID: MB0705 Lab Sample ID: MB0705

Date Analyzed: 07/05/06 Time Analyzed: 1413

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0705	LCS0705	LCS0705	1309
02	LCS0705	LCS0705	LCS0705A	1347
03	TRIP BLANK	JN72D	JN72D	1525
04	TRIP BLANK-2	JO17B	JO17B	1552
05	TRIP BLANK-3	JO18E	JO18E	1618
06	IG5-S1	JN72A	JN72A	1737
07	IG6-S1	JN72B	JN72B	1803
08	IG2-S1	JO17A	JO17A	1829
09	IG1-S1	JO18A	JO18A	1856
10	IG1-S1	JO18A	JO18AMS	1922
11	IG1-S1	JO18A	JO18AMD	1948
12	IG9-S1	JO18B	JO18B	2015
13	IG7-S1	JO18C	JO18C	2041
14	TRIP BLANK	JO43E	JO43E	2107
15	IG3-S1	JO43A	JO43A	2134
16	IG8-S1	JO43B	JO43B	2200
17	IG4-S1	JO43C	JO43C	2226
18				
19				
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22				
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30				

COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

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Volatiles by Purge & Trap GC/MS
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Sample ID: MB-070506
METHOD BLANK

Lab Sample ID: MB-070506
LIMS ID: 06-11362
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/05/06 14:13

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	118%
d8-Toluene	106%
Bromofluorobenzene	103%
d4-1,2-Dichlorobenzene	98.3%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ANALYTICAL RESOURCES, INC Contract: G & G

Lab Code: ARI Case No.: KLAMATH RIVER SDG No.: JO43

Lab File ID: MB0707 Lab Sample ID: MB0707

Date Analyzed: 07/07/06 Time Analyzed: 1056

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		LCS0707	LCS0707	0953
02		LCS0707	LCS0707A	1030
03	IG6-S1	JN72B	JN72B2	1234
04	IG2-S1	JO17A	JO17A2	1300
05	IG9-S1	JO18B	JO18B2	1326
06	IG7-S1	JO18C	JO18C2	1353
07	IG3-S1	JO43A	JO43A2	1419
08	IG8-S1	JO43B	JO43B2	1445
09	IG4-S1	JO43C	JO43C2	1512
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11				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: MB-070706
METHOD BLANK

Lab Sample ID: MB-070706
LIMS ID: 06-11363
Matrix: Sediment
Data Release Authorized:
Reported: 07/11/06

QC Report No: JN72-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/07/06 10:56

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.9%
d8-Toluene	97.5%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	105%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-9,S-1
SAMPLE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 21:25
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 75.9%
pH: 7.6

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**58**
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**23**
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-9,S-1
SAMPLE

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Date Analyzed: 07/21/06 21:25

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	**Phenanthrene**	**20**	**19 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**18 J**
129-00-0	**Pyrene**	**20**	**16 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**120**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	67.6%	2-Fluorobiphenyl	67.6%
d14-p-Terphenyl	64.8%	d4-1,2-Dichlorobenzene	49.2%
d5-Phenol	77.1%	2-Fluorophenol	77.3%
2,4,6-Tribromophenol	80.0%	d4-2-Chlorophenol	69.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-2,S-1
SAMPLE

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 21:56
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 72.8%
pH: 7.1

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**91**
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	**Isophorone**	**20**	**14 J**
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	**Benzoic Acid**	**200**	**140 J**
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**43**
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	**Acenaphthylene**	**20**	**12 J**
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-2,S-1
SAMPLE

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Date Analyzed: 07/21/06 21:56

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	**Phenanthrene**	**20**	**36**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**40**
129-00-0	**Pyrene**	**20**	**32**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**24**
218-01-9	**Chrysene**	**20**	**11 J**
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.4%	2-Fluorobiphenyl	57.6%
d14-p-Terphenyl	52.4%	d4-1,2-Dichlorobenzene	43.2%
d5-Phenol	66.9%	2-Fluorophenol	65.6%
2,4,6-Tribromophenol	69.9%	d4-2-Chlorophenol	60.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/24/06 10:23
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 75.1%
pH: 7.5

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**33**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**16 J**
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Date Analyzed: 07/24/06 10:23

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	**Phenanthrene**	**20**	**17 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**18 J**
129-00-0	**Pyrene**	**20**	**13 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**110**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.0%	2-Fluorobiphenyl	58.4%
d14-p-Terphenyl	52.0%	d4-1,2-Dichlorobenzene	43.6%
d5-Phenol	66.9%	2-Fluorophenol	64.3%
2,4,6-Tribromophenol	66.7%	d4-2-Chlorophenol	60.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/24/06 10:55
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.0 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 73.4%
pH: 7.2

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**22**
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	**Isophorone**	**20**	**13 J**
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**14 J**
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Date Analyzed: 07/24/06 10:55

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	**Phenanthrene**	**20**	**16 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**21**
129-00-0	**Pyrene**	**20**	**16 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**85**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	44.8%	2-Fluorobiphenyl	42.8%
d14-p-Terphenyl	40.0%	d4-1,2-Dichlorobenzene	32.3%
d5-Phenol	49.3%	2-Fluorophenol	49.3%
2,4,6-Tribromophenol	50.9%	d4-2-Chlorophenol	44.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-7,S-1
SAMPLE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 17:41
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 28.4%
pH: 7.8

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**71**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-7,S-1
SAMPLE

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Date Analyzed: 07/21/06 17:41

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**17 J**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.8%	2-Fluorobiphenyl	67.6%
d14-p-Terphenyl	68.4%	d4-1,2-Dichlorobenzene	50.4%
d5-Phenol	74.7%	2-Fluorophenol	73.6%
2,4,6-Tribromophenol	78.7%	d4-2-Chlorophenol	66.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-1,S-1
SAMPLE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 18:13
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%
pH: 9.0

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	98	< 98 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	98	< 98 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	98	< 98 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	98	< 98 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	98	< 98 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	98	< 98 U
88-06-2	2,4,6-Trichlorophenol	98	< 98 U
95-95-4	2,4,5-Trichlorophenol	98	< 98 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	98	< 98 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	98	< 98 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	98	< 98 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	98	< 98 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-1,S-1
SAMPLE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Date Analyzed: 07/21/06 18:13

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	98	< 98 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	98	< 98 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	98	< 98 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	98	< 98 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.4%	2-Fluorobiphenyl	70.8%
d14-p-Terphenyl	71.2%	d4-1,2-Dichlorobenzene	53.6%
d5-Phenol	76.5%	2-Fluorophenol	73.6%
2,4,6-Tribromophenol	78.7%	d4-2-Chlorophenol	67.2%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-11,S-1
SAMPLE

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 19:49
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 62.1%
pH: 7.2

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**18 J**
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-11,S-1
SAMPLE

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Date Analyzed: 07/21/06 19:49

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	**Diethylphthalate**	**20**	**52**
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	**Phenanthrene**	**20**	**15 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**16 J**
129-00-0	**Pyrene**	**20**	**13 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**75**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.0%	2-Fluorobiphenyl	65.6%
d14-p-Terphenyl	64.4%	d4-1,2-Dichlorobenzene	43.6%
d5-Phenol	73.3%	2-Fluorophenol	68.5%
2,4,6-Tribromophenol	76.5%	d4-2-Chlorophenol	64.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-8,S-1
SAMPLE

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 20:21
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 76.0%
pH: 7.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	**2-Methylphenol**	**20**	**14 J**
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**220**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**17 J**
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-8,S-1
SAMPLE

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Date Analyzed: 07/21/06 20:21

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	**Phenanthrene**	**20**	**14 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**28 B**
206-44-0	**Fluoranthene**	**20**	**18 J**
129-00-0	**Pyrene**	**20**	**13 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**17 J**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	56.8%	2-Fluorobiphenyl	58.0%
d14-p-Terphenyl	52.4%	d4-1,2-Dichlorobenzene	44.8%
d5-Phenol	64.8%	2-Fluorophenol	60.3%
2,4,6-Tribromophenol	65.9%	d4-2-Chlorophenol	56.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-4,S-1
SAMPLE

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 20:53
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 74.7%
pH: 7.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**96**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**38**
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	**Acenaphthylene**	**20**	**11 J**
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-4,S-1
SAMPLE

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Date Analyzed: 07/21/06 20:53

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	**Phenanthrene**	**20**	**32**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**20 B**
206-44-0	**Fluoranthene**	**20**	**33**
129-00-0	**Pyrene**	**20**	**25**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**130**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	69.2%	2-Fluorobiphenyl	70.4%
d14-p-Terphenyl	62.4%	d4-1,2-Dichlorobenzene	52.4%
d5-Phenol	78.7%	2-Fluorophenol	75.7%
2,4,6-Tribromophenol	80.0%	d4-2-Chlorophenol	69.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-071806	58.4%	50.8%	72.8%	39.9%*	68.8%	70.4%	71.5%	62.1%	1
LCS-071806	56.4%	56.8%	70.4%	44.0%	62.7%	63.5%	66.9%	56.8%	0
C-9,S-1	67.6%	67.6%	64.8%	49.2%	77.1%	77.3%	80.0%	69.1%	0
C-2,S-1	58.4%	57.6%	52.4%	43.2%	66.9%	65.6%	69.9%	60.8%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-12040 to 06-12041

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-071806	58.4%	50.8%	72.8%	39.9%*	68.8%	70.4%	71.5%	62.1%	1
LCS-071806	56.4%	56.8%	70.4%	44.0%	62.7%	63.5%	66.9%	56.8%	0
C-10,S-1	62.0%	58.4%	52.0%	43.6%	66.9%	64.3%	66.7%	60.0%	0
C-5,S-1	44.8%	42.8%	40.0%	32.3%	49.3%	49.3%	50.9%	44.3%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-12051 to 06-12052

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
C-7,S-1	66.8%	67.6%	68.4%	50.4%	74.7%	73.6%	78.7%	66.1%	0
MB-071806	58.4%	50.8%	72.8%	39.9%*	68.8%	70.4%	71.5%	62.1%	1
LCS-071806	56.4%	56.8%	70.4%	44.0%	62.7%	63.5%	66.9%	56.8%	0
C-1,S-1	70.4%	70.8%	71.2%	53.6%	76.5%	73.6%	78.7%	67.2%	0
C-1,S-1 MS	67.2%	66.8%	67.6%	53.6%	72.5%	73.6%	72.8%	64.5%	0
C-1,S-1 MSD	66.4%	68.0%	74.4%	49.6%	72.5%	71.2%	78.9%	64.8%	0
C-11,S-1	62.0%	65.6%	64.4%	43.6%	73.3%	68.5%	76.5%	64.8%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-12092 to 06-12094

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-071806	58.4%	50.8%	72.8%	39.9%*	68.8%	70.4%	71.5%	62.1%	1
LCS-071806	56.4%	56.8%	70.4%	44.0%	62.7%	63.5%	66.9%	56.8%	0
C-8,S-1	56.8%	58.0%	52.4%	44.8%	64.8%	60.3%	65.9%	56.0%	0
C-4,S-1	69.2%	70.4%	62.4%	52.4%	78.7%	75.7%	80.0%	69.1%	0

		LCS/MB LIMITS	QC LIMITS
(NBZ)	= d5-Nitrobenzene	(46-87)	(27-101)
(FBP)	= 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH)	= d14-p-Terphenyl	(37-114)	(12-120)
(DCB)	= d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL)	= d5-Phenol	(47-87)	(26-99)
(2FP)	= 2-Fluorophenol	(42-87)	(22-91)
(TBP)	= 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP)	= d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-12109 to 06-12110

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: C-1,S-1
MS/MSD

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted MS/MSD: 07/18/06

Date Analyzed MS: 07/21/06 18:46
MSD: 07/21/06 19:17
Instrument/Analyst MS: NT4/LJR
MSD: NT4/LJR
GPC Cleanup: NO

Sample Amount MS: 26.0 g-dry-wt
MSD: 26.1 g-dry-wt
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Percent Moisture: 9.0%
pH: 9.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 19.5	465	722	64.4%	446	719	62.0%	4.2%
2-Chlorophenol	< 19.5	471	722	65.2%	445	719	61.9%	5.7%
1,4-Dichlorobenzene	< 19.5	270	481	56.1%	235	479	49.1%	13.9%
N-Nitroso-Di-N-Propylamine	< 97.7	342	481	71.1%	330	479	68.9%	3.6%
1,2,4-Trichlorobenzene	< 19.5	281	481	58.4%	260	479	54.3%	7.8%
4-Chloro-3-methylphenol	< 97.7	508	722	70.4%	507	719	70.5%	0.2%
Acenaphthene	< 19.5	323	481	67.2%	325	479	67.8%	0.6%
4-Nitrophenol	< 97.7	528	722	73.1%	535	719	74.4%	1.3%
2,4-Dinitrotoluene	< 97.7	339	481	70.5%	334	479	69.7%	1.5%
Pentachlorophenol	< 97.7	599	722	83.0%	635	719	88.3%	5.8%
Pyrene	< 19.5	322	481	66.9%	341	479	71.2%	5.7%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-1,S-1
MATRIX SPIKE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 18:46
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 26.0 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%
pH: 9.0

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	---
111-44-4	Bis-(2-Chloroethyl) Ether	19	< 19 U
95-57-8	2-Chlorophenol	19	---
541-73-1	1,3-Dichlorobenzene	19	< 19 U
106-46-7	1,4-Dichlorobenzene	19	---
100-51-6	Benzyl Alcohol	19	< 19 U
95-50-1	1,2-Dichlorobenzene	19	< 19 U
95-48-7	2-Methylphenol	19	< 19 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	19	< 19 U
106-44-5	4-Methylphenol	19	< 19 U
621-64-7	N-Nitroso-Di-N-Propylamine	96	---
67-72-1	Hexachloroethane	19	< 19 U
98-95-3	Nitrobenzene	19	< 19 U
78-59-1	Isophorone	19	< 19 U
88-75-5	2-Nitrophenol	96	< 96 U
105-67-9	2,4-Dimethylphenol	19	< 19 U
65-85-0	Benzoic Acid	190	< 190 U
111-91-1	bis(2-Chloroethoxy) Methane	19	< 19 U
120-83-2	2,4-Dichlorophenol	96	< 96 U
120-82-1	1,2,4-Trichlorobenzene	19	---
91-20-3	Naphthalene	19	< 19 U
106-47-8	4-Chloroaniline	96	< 96 U
87-68-3	Hexachlorobutadiene	19	< 19 U
59-50-7	4-Chloro-3-methylphenol	96	---
91-57-6	2-Methylnaphthalene	19	< 19 U
77-47-4	Hexachlorocyclopentadiene	96	< 96 U
88-06-2	2,4,6-Trichlorophenol	96	< 96 U
95-95-4	2,4,5-Trichlorophenol	96	< 96 U
91-58-7	2-Chloronaphthalene	19	< 19 U
88-74-4	2-Nitroaniline	96	< 96 U
131-11-3	Dimethylphthalate	19	< 19 U
208-96-8	Acenaphthylene	19	< 19 U
99-09-2	3-Nitroaniline	96	< 96 U
83-32-9	Acenaphthene	19	---
51-28-5	2,4-Dinitrophenol	190	< 190 U
100-02-7	4-Nitrophenol	96	---
132-64-9	Dibenzofuran	19	< 19 U
606-20-2	2,6-Dinitrotoluene	96	< 96 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-1,S-1
MATRIX SPIKE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Date Analyzed: 07/21/06 18:46

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	96	---
84-66-2	Diethylphthalate	19	< 19 U
7005-72-3	4-Chlorophenyl-phenylether	19	< 19 U
86-73-7	Fluorene	19	< 19 U
100-01-6	4-Nitroaniline	96	< 96 U
534-52-1	4,6-Dinitro-2-Methylphenol	190	< 190 U
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
101-55-3	4-Bromophenyl-phenylether	19	< 19 U
118-74-1	Hexachlorobenzene	19	< 19 U
87-86-5	Pentachlorophenol	96	---
85-01-8	Phenanthrene	19	< 19 U
86-74-8	Carbazole	19	< 19 U
120-12-7	Anthracene	19	< 19 U
84-74-2	Di-n-Butylphthalate	19	< 19 U
206-44-0	Fluoranthene	19	< 19 U
129-00-0	Pyrene	19	---
85-68-7	Butylbenzylphthalate	19	< 19 U
91-94-1	3,3'-Dichlorobenzidine	96	< 96 U
56-55-3	Benzo(a)anthracene	19	< 19 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**19**	**11 J**
218-01-9	Chrysene	19	< 19 U
117-84-0	Di-n-Octyl phthalate	19	< 19 U
205-99-2	Benzo(b)fluoranthene	19	< 19 U
207-08-9	Benzo(k)fluoranthene	19	< 19 U
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
191-24-2	Benzo(g,h,i)perylene	19	< 19 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	67.2%	2-Fluorobiphenyl	66.8%
d14-p-Terphenyl	67.6%	d4-1,2-Dichlorobenzene	53.6%
d5-Phenol	72.5%	2-Fluorophenol	73.6%
2,4,6-Tribromophenol	72.8%	d4-2-Chlorophenol	64.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-1,S-1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 19:17
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 26.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 9.0%
pH: 9.0

CAS Number	Analyte	RL	Result
108-95-2	Phenol	19	---
111-44-4	Bis-(2-Chloroethyl) Ether	19	< 19 U
95-57-8	2-Chlorophenol	19	---
541-73-1	1,3-Dichlorobenzene	19	< 19 U
106-46-7	1,4-Dichlorobenzene	19	---
100-51-6	Benzyl Alcohol	19	< 19 U
95-50-1	1,2-Dichlorobenzene	19	< 19 U
95-48-7	2-Methylphenol	19	< 19 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	19	< 19 U
106-44-5	4-Methylphenol	19	< 19 U
621-64-7	N-Nitroso-Di-N-Propylamine	96	---
67-72-1	Hexachloroethane	19	< 19 U
98-95-3	Nitrobenzene	19	< 19 U
78-59-1	Isophorone	19	< 19 U
88-75-5	2-Nitrophenol	96	< 96 U
105-67-9	2,4-Dimethylphenol	19	< 19 U
65-85-0	Benzoic Acid	190	< 190 U
111-91-1	bis(2-Chloroethoxy) Methane	19	< 19 U
120-83-2	2,4-Dichlorophenol	96	< 96 U
120-82-1	1,2,4-Trichlorobenzene	19	---
91-20-3	Naphthalene	19	< 19 U
106-47-8	4-Chloroaniline	96	< 96 U
87-68-3	Hexachlorobutadiene	19	< 19 U
59-50-7	4-Chloro-3-methylphenol	96	---
91-57-6	2-Methylnaphthalene	19	< 19 U
77-47-4	Hexachlorocyclopentadiene	96	< 96 U
88-06-2	2,4,6-Trichlorophenol	96	< 96 U
95-95-4	2,4,5-Trichlorophenol	96	< 96 U
91-58-7	2-Chloronaphthalene	19	< 19 U
88-74-4	2-Nitroaniline	96	< 96 U
131-11-3	Dimethylphthalate	19	< 19 U
208-96-8	Acenaphthylene	19	< 19 U
99-09-2	3-Nitroaniline	96	< 96 U
83-32-9	Acenaphthene	19	---
51-28-5	2,4-Dinitrophenol	190	< 190 U
100-02-7	4-Nitrophenol	96	---
132-64-9	Dibenzofuran	19	< 19 U
606-20-2	2,6-Dinitrotoluene	96	< 96 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-1,S-1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Date Analyzed: 07/21/06 19:17

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	96	---
84-66-2	Diethylphthalate	19	< 19 U
7005-72-3	4-Chlorophenyl-phenylether	19	< 19 U
86-73-7	Fluorene	19	< 19 U
100-01-6	4-Nitroaniline	96	< 96 U
534-52-1	4,6-Dinitro-2-Methylphenol	190	< 190 U
86-30-6	N-Nitrosodiphenylamine	19	< 19 U
101-55-3	4-Bromophenyl-phenylether	19	< 19 U
118-74-1	Hexachlorobenzene	19	< 19 U
87-86-5	Pentachlorophenol	96	---
85-01-8	Phenanthrene	19	< 19 U
86-74-8	Carbazole	19	< 19 U
120-12-7	Anthracene	19	< 19 U
84-74-2	Di-n-Butylphthalate	19	< 19 U
206-44-0	Fluoranthene	19	< 19 U
129-00-0	Pyrene	19	---
85-68-7	Butylbenzylphthalate	19	< 19 U
91-94-1	3,3'-Dichlorobenzidine	96	< 96 U
56-55-3	Benzo(a)anthracene	19	< 19 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**19**	**14 J**
218-01-9	Chrysene	19	< 19 U
117-84-0	Di-n-Octyl phthalate	19	< 19 U
205-99-2	Benzo(b)fluoranthene	19	< 19 U
207-08-9	Benzo(k)fluoranthene	19	< 19 U
50-32-8	Benzo(a)pyrene	19	< 19 U
193-39-5	Indeno(1,2,3-cd)pyrene	19	< 19 U
53-70-3	Dibenz(a,h)anthracene	19	< 19 U
191-24-2	Benzo(g,h,i)perylene	19	< 19 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.4%	2-Fluorobiphenyl	68.0%
d14-p-Terphenyl	74.4%	d4-1,2-Dichlorobenzene	49.6%
d5-Phenol	72.5%	2-Fluorophenol	71.2%
2,4,6-Tribromophenol	78.9%	d4-2-Chlorophenol	64.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-071806
LAB CONTROL

Lab Sample ID: LCS-071806
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Date Extracted: 07/18/06
Date Analyzed: 07/24/06 09:31
Instrument/Analyst: NT4/LJR
GPC Cleanup: NO

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	348	500	69.6%
Bis-(2-Chloroethyl) Ether	341	500	68.2%
2-Chlorophenol	313	500	62.6%
1,3-Dichlorobenzene	262	500	52.4%
1,4-Dichlorobenzene	261	500	52.2%
Benzyl Alcohol	332	500	66.4%
1,2-Dichlorobenzene	274	500	54.8%
2-Methylphenol	342	500	68.4%
2,2'-Oxybis(1-Chloropropane)	400	500	80.0%
4-Methylphenol	713	1000	71.3%
N-Nitroso-Di-N-Propylamine	341	500	68.2%
Hexachloroethane	251	500	50.2%
Nitrobenzene	321	500	64.2%
Isophorone	348	500	69.6%
2-Nitrophenol	324	500	64.8%
2,4-Dimethylphenol	240	500	48.0%
Benzoic Acid	401	500	80.2%
bis(2-Chloroethoxy) Methane	342	500	68.4%
2,4-Dichlorophenol	330	500	66.0%
1,2,4-Trichlorobenzene	280	500	56.0%
Naphthalene	301	500	60.2%
4-Chloroaniline	209	1200	17.4%
Hexachlorobutadiene	271	500	54.2%
4-Chloro-3-methylphenol	354	500	70.8%
2-Methylnaphthalene	308	500	61.6%
Hexachlorocyclopentadiene	199	500	39.8%
2,4,6-Trichlorophenol	359	500	71.8%
2,4,5-Trichlorophenol	358	500	71.6%
2-Chloronaphthalene	337	500	67.4%
2-Nitroaniline	411	500	82.2%
Dimethylphthalate	361	500	72.2%
Acenaphthylene	348	500	69.6%
3-Nitroaniline	572	1280	44.7%
Acenaphthene	344	500	68.8%
2,4-Dinitrophenol	508	500	102%
4-Nitrophenol	380	500	76.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-071806
LAB CONTROL

Lab Sample ID: LCS-071806
LIMS ID: 06-12093
Matrix: Sediment
Date Analyzed: 07/24/06 09:31

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Analyte	Lab Control	Spike Added	Recovery
Dibenzofuran	353	500	70.6%
2,6-Dinitrotoluene	377	500	75.4%
2,4-Dinitrotoluene	387	500	77.4%
Diethylphthalate	368	500	73.6%
4-Chlorophenyl-phenylether	346	500	69.2%
Fluorene	346	500	69.2%
4-Nitroaniline	254	500	50.8%
4,6-Dinitro-2-Methylphenol	421	500	84.2%
N-Nitrosodiphenylamine	346	500	69.2%
4-Bromophenyl-phenylether	363	500	72.6%
Hexachlorobenzene	364	500	72.8%
Pentachlorophenol	357	500	71.4%
Phenanthrene	362	500	72.4%
Carbazole	360	500	72.0%
Anthracene	341	500	68.2%
Di-n-Butylphthalate	380	500	76.0%
Fluoranthene	375	500	75.0%
Pyrene	408	500	81.6%
Butylbenzylphthalate	398	500	79.6%
3,3'-Dichlorobenzidine	217	1280	17.0%
Benzo(a)anthracene	373	500	74.6%
bis(2-Ethylhexyl)phthalate	537	500	107%
Chrysene	377	500	75.4%
Di-n-Octyl phthalate	399	500	79.8%
Benzo(b)fluoranthene	419	500	83.8%
Benzo(k)fluoranthene	387	500	77.4%
Benzo(a)pyrene	366	500	73.2%
Indeno(1,2,3-cd)pyrene	381	500	76.2%
Dibenz(a,h)anthracene	447	500	89.4%
Benzo(g,h,i)perylene	457	500	91.4%

Semivolatile Surrogate Recovery	
d5-Nitrobenzene	56.4%
2-Fluorobiphenyl	56.8%
d14-p-Terphenyl	70.4%
d4-1,2-Dichlorobenzene	44.0%
d5-Phenol	62.7%
2-Fluorophenol	63.5%
2,4,6-Tribromophenol	66.9%
d4-2-Chlorophenol	56.8%

Results reported in µg/kg

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-071806
METHOD BLANK

Lab Sample ID: MB-071806
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/24/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/18/06
Date Analyzed: 07/21/06 12:21
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-071806
METHOD BLANK

Lab Sample ID: MB-071806
LIMS ID: 06-12093
Matrix: Sediment
Date Analyzed: 07/21/06 12:21

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**26**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.4%	2-Fluorobiphenyl	50.8%
d14-p-Terphenyl	72.8%	d4-1,2-Dichlorobenzene	39.9%
d5-Phenol	68.8%	2-Fluorophenol	70.4%
2,4,6-Tribromophenol	71.5%	d4-2-Chlorophenol	62.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 18:01
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG2-S1
SAMPLE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Date Analyzed: 07/13/06 18:01

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**21 B**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**160**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	39.1%	2-Fluorobiphenyl	39.6%
d14-p-Terphenyl	39.2%	d4-1,2-Dichlorobenzene	28.4%
d5-Phenol	46.1%	2-Fluorophenol	38.7%
2,4,6-Tribromophenol	46.7%	d4-2-Chlorophenol	41.3%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 18:34
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 47.3%
pH: 7.1

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG1-S1
SAMPLE

Lab Sample ID: JO18A
LIMS ID: 06-11570
Matrix: Sediment
Date Analyzed: 07/13/06 18:34

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	66.8%	2-Fluorobiphenyl	62.0%
d14-p-Terphenyl	60.4%	d4-1,2-Dichlorobenzene	52.4%
d5-Phenol	70.4%	2-Fluorophenol	60.3%
2,4,6-Tribromophenol	72.5%	d4-2-Chlorophenol	64.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 19:08
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 60.4%
pH: 6.9

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG9-S1
SAMPLE

Lab Sample ID: JO18B
LIMS ID: 06-11571
Matrix: Sediment
Date Analyzed: 07/13/06 19:08

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**39**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.8%	2-Fluorobiphenyl	59.2%
d14-p-Terphenyl	59.2%	d4-1,2-Dichlorobenzene	46.8%
d5-Phenol	68.0%	2-Fluorophenol	58.9%
2,4,6-Tribromophenol	70.7%	d4-2-Chlorophenol	62.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 19:41
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 71.8%
pH: 7.3

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG7-S1
SAMPLE

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Date Analyzed: 07/13/06 19:41

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**77**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	20.1%	2-Fluorobiphenyl	20.6%
d14-p-Terphenyl	19.9%	d4-1,2-Dichlorobenzene	16.0%
d5-Phenol	23.5%	2-Fluorophenol	20.0%
2,4,6-Tribromophenol	24.6%	d4-2-Chlorophenol	20.3%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG3-S1
SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 20:15
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 75.5%
pH: 6.7

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS **Sample ID: IG3-S1**
 SAMPLE

Lab Sample ID: JO43A
LIMS ID: 06-11676
Matrix: Sediment
Date Analyzed: 07/13/06 20:15

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**76**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	33.8%	2-Fluorobiphenyl	33.9%
d14-p-Terphenyl	34.0%	d4-1,2-Dichlorobenzene	25.6%
d5-Phenol	37.6%	2-Fluorophenol	31.5%
2,4,6-Tribromophenol	40.3%	d4-2-Chlorophenol	33.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 20:48
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 75.6%
pH: 7.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**23**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG8-S1
SAMPLE

Lab Sample ID: JO43B
LIMS ID: 06-11677
Matrix: Sediment
Date Analyzed: 07/13/06 20:48

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**22 B**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**50**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	52.0%	2-Fluorobiphenyl	48.8%
d14-p-Terphenyl	48.4%	d4-1,2-Dichlorobenzene	42.8%
d5-Phenol	57.1%	2-Fluorophenol	48.5%
2,4,6-Tribromophenol	58.7%	d4-2-Chlorophenol	52.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002
Date Sampled: 06/28/06
Date Received: 06/30/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 21:21
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 74.5%
pH: 7.5

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG4-S1
SAMPLE

Lab Sample ID: JO43C
LIMS ID: 06-11678
Matrix: Sediment
Date Analyzed: 07/13/06 21:21

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**55**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	45.2%	2-Fluorobiphenyl	44.4%
d14-p-Terphenyl	48.8%	d4-1,2-Dichlorobenzene	25.8%
d5-Phenol	54.7%	2-Fluorophenol	45.3%
2,4,6-Tribromophenol	59.7%	d4-2-Chlorophenol	48.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 21:55
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 76.1%
pH: 6.9

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**48**
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**22**
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS
Page 2 of 2

Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Date Analyzed: 07/13/06 21:55

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	**Phenanthrene**	**20**	**24**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**24**
129-00-0	**Pyrene**	**20**	**22**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**73**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	52.4%	2-Fluorobiphenyl	49.6%
d14-p-Terphenyl	51.2%	d4-1,2-Dichlorobenzene	42.0%
d5-Phenol	54.9%	2-Fluorophenol	48.0%
2,4,6-Tribromophenol	60.0%	d4-2-Chlorophenol	50.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: J017-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-070706	73.2%	70.8%	81.2%	65.6%	77.1%	68.0%	72.5%	72.5%	0
LCS-070706	73.2%	71.6%	80.0%	62.4%	78.9%	66.4%	83.5%	72.0%	0
IG2-S1	39.1%	39.6%	39.2%	28.4%	46.1%	38.7%	46.7%	41.3%	0
IG2-S1 MS	70.8%	68.4%	62.0%	56.0%	80.8%	70.1%	78.4%	73.3%	0
IG2-S1 MSD	58.0%	55.2%	50.0%	41.2%	61.9%	54.1%	61.9%	56.5%	0

		LCS/MB LIMITS	QC LIMITS
(NBZ)	= d5-Nitrobenzene	(46-87)	(27-101)
(FBP)	= 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH)	= d14-p-Terphenyl	(37-114)	(12-120)
(DCB)	= d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL)	= d5-Phenol	(47-87)	(26-99)
(2FP)	= 2-Fluorophenol	(42-87)	(22-91)
(TBP)	= 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP)	= d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-11567 to 06-11567

FORM-II SW8270

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-070706	73.2%	70.8%	81.2%	65.6%	77.1%	68.0%	72.5%	72.5%	0
LCS-070706	73.2%	71.6%	80.0%	62.4%	78.9%	66.4%	83.5%	72.0%	0
IG1-S1	66.8%	62.0%	60.4%	52.4%	70.4%	60.3%	72.5%	64.8%	0
IG9-S1	60.8%	59.2%	59.2%	46.8%	68.0%	58.9%	70.7%	62.9%	0
IG7-S1	20.1%*	20.6%*	19.9%	16.0%*	23.5%*	20.0%*	24.6%	20.3%*	6

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-11570 to 06-11572

FORM-II SW8270

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO43-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-070706	73.2%	70.8%	81.2%	65.6%	77.1%	68.0%	72.5%	72.5%	0
LCS-070706	73.2%	71.6%	80.0%	62.4%	78.9%	66.4%	83.5%	72.0%	0
IG3-S1	33.8%	33.9%	34.0%	25.6%	37.6%	31.5%	40.3%	33.9%	0
IG8-S1	52.0%	48.8%	48.4%	42.8%	57.1%	48.5%	58.7%	52.5%	0
IG4-S1	45.2%	44.4%	48.8%	25.8%	54.7%	45.3%	59.7%	48.8%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-11676 to 06-11678

FORM-II SW8270

Page 1 for JO43

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-070706	73.2%	70.8%	81.2%	65.6%	77.1%	68.0%	72.5%	72.5%	0
LCS-070706	73.2%	71.6%	80.0%	62.4%	78.9%	66.4%	83.5%	72.0%	0
C3-S1	52.4%	49.6%	51.2%	42.0%	54.9%	48.0%	60.0%	50.9%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-11771 to 06-11771

FORM-II SW8270

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: IG2-S1
MS/MSD

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted MS/MSD: 07/07/06

Date Analyzed MS: 07/14/06 12:10
MSD: 07/14/06 12:42
Instrument/Analyst MS: NT4/LJR
MSD: NT4/LJR
GPC Cleanup: NO

Sample Amount MS: 25.2 g-dry-wt
MSD: 25.2 g-dry-wt
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Percent Moisture: 66.8%
pH: 7.3

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 19.8	509	743	68.5%	378	743	50.9%	29.5%
2-Chlorophenol	< 19.8	543	743	73.1%	403	743	54.2%	29.6%
1,4-Dichlorobenzene	< 19.8	298	495	60.2%	222	495	44.8%	29.2%
N-Nitroso-Di-N-Propylamine	< 99.0	366	495	73.9%	281	495	56.8%	26.3%
1,2,4-Trichlorobenzene	< 19.8	301	495	60.8%	239	495	48.3%	23.0%
4-Chloro-3-methylphenol	< 99.0	498	743	67.0%	395	743	53.2%	23.1%
Acenaphthene	< 19.8	335	495	67.7%	262	495	52.9%	24.5%
4-Nitrophenol	< 99.0	503	743	67.7%	372	743	50.1%	29.9%
2,4-Dinitrotoluene	< 99.0	307	495	62.0%	220	495	44.4%	33.0%
Pentachlorophenol	< 99.0	579	743	77.9%	442	743	59.5%	26.8%
Pyrene	< 19.8	302	495	61.0%	237	495	47.9%	24.1%

Results reported in μg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 12:10
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	---
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	---
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	---
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	---
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	---
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	---
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG2-S1
MATRIX SPIKE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Date Analyzed: 07/14/06 12:10

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	---
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	---
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	---
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	---
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	---
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**170**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.8%	2-Fluorobiphenyl	68.4%
d14-p-Terphenyl	62.0%	d4-1,2-Dichlorobenzene	56.0%
d5-Phenol	80.8%	2-Fluorophenol	70.1%
2,4,6-Tribromophenol	78.4%	d4-2-Chlorophenol	73.3%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG2-S1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/14/06 12:42
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.2 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 66.8%
pH: 7.3

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	---
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	---
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	---
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	99	---
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	---
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	---
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS
Page 2 of 2

Sample ID: IG2-S1
MATRIX SPIKE DUPLICATE

Lab Sample ID: JO17A
LIMS ID: 06-11567
Matrix: Sediment
Date Analyzed: 07/14/06 12:42

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	---
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	---
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U
121-14-2	2,4-Dinitrotoluene	99	---
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	---
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	---
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**130**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.0%	2-Fluorobiphenyl	55.2%
d14-p-Terphenyl	50.0%	d4-1,2-Dichlorobenzene	41.2%
d5-Phenol	61.9%	2-Fluorophenol	54.1%
2,4,6-Tribromophenol	61.9%	d4-2-Chlorophenol	56.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-070706
LAB CONTROL

Lab Sample ID: LCS-070706
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: 06/24/06
Date Received: 06/28/06

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 11:18
Instrument/Analyst: NT4/LJR
GPC Cleanup: NO

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	395	500	79.0%
Bis-(2-Chloroethyl) Ether	385	500	77.0%
2-Chlorophenol	377	500	75.4%
1,3-Dichlorobenzene	326	500	65.2%
1,4-Dichlorobenzene	325	500	65.0%
Benzyl Alcohol	359	500	71.8%
1,2-Dichlorobenzene	334	500	66.8%
2-Methylphenol	405	500	81.0%
2,2'-Oxybis(1-Chloropropane)	460	500	92.0%
4-Methylphenol	822	1000	82.2%
N-Nitroso-Di-N-Propylamine	400	500	80.0%
Hexachloroethane	312	500	62.4%
Nitrobenzene	379	500	75.8%
Isophorone	403	500	80.6%
2-Nitrophenol	399	500	79.8%
2,4-Dimethylphenol	337	500	67.4%
Benzoic Acid	513	500	103%
bis(2-Chloroethoxy) Methane	398	500	79.6%
2,4-Dichlorophenol	382	500	76.4%
1,2,4-Trichlorobenzene	337	500	67.4%
Naphthalene	349	500	69.8%
4-Chloroaniline	315	1200	26.2%
Hexachlorobutadiene	315	500	63.0%
4-Chloro-3-methylphenol	399	500	79.8%
2-Methylnaphthalene	355	500	71.0%
Hexachlorocyclopentadiene	364	500	72.8%
2,4,6-Trichlorophenol	409	500	81.8%
2,4,5-Trichlorophenol	393	500	78.6%
2-Chloronaphthalene	370	500	74.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-070706
LAB CONTROL

Lab Sample ID: LCS-070706
LIMS ID: 06-11567
Matrix: Sediment
Date Analyzed: 07/13/06 11:18

QC Report No: J017-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Analyte	Lab Control	Spike Added	Recovery
2-Nitroaniline	450	500	90.0%
Dimethylphthalate	393	500	78.6%
Acenaphthylene	380	500	76.0%
3-Nitroaniline	669	1280	52.3%
Acenaphthene	378	500	75.6%
2,4-Dinitrophenol	748	500	150%
4-Nitrophenol	318	500	63.6%
Dibenzofuran	386	500	77.2%
2,6-Dinitrotoluene	416	500	83.2%
2,4-Dinitrotoluene	428	500	85.6%
Diethylphthalate	388	500	77.6%
4-Chlorophenyl-phenylether	387	500	77.4%
Fluorene	375	500	75.0%
4-Nitroaniline	334	500	66.8%
4,6-Dinitro-2-Methylphenol	540	500	108%
N-Nitrosodiphenylamine	374	500	74.8%
4-Bromophenyl-phenylether	388	500	77.6%
Hexachlorobenzene	377	500	75.4%
Pentachlorophenol	402	500	80.4%
Phenanthrene	384	500	76.8%
Carbazole	386	500	77.2%
Anthracene	366	500	73.2%
Di-n-Butylphthalate	417	500	83.4%
Fluoranthene	417	500	83.4%
Pyrene	406	500	81.2%
Butylbenzylphthalate	414	500	82.8%
3,3'-Dichlorobenzidine	313	1280	24.5%
Benzo(a)anthracene	395	500	79.0%
bis(2-Ethylhexyl)phthalate	458	500	91.6%
Chrysene	406	500	81.2%
Di-n-Octyl phthalate	417	500	83.4%
Benzo(b)fluoranthene	479	500	95.8%
Benzo(k)fluoranthene	441	500	88.2%
Benzo(a)pyrene	422	500	84.4%
Indeno(1,2,3-cd)pyrene	435	500	87.0%
Dibenz(a,h)anthracene	444	500	88.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-070706
LAB CONTROL

Lab Sample ID: LCS-070706
LIMS ID: 06-11567
Matrix: Sediment
Date Analyzed: 07/13/06 11:18

QC Report No: J017-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

Analyte	Lab Control	Spike Added	Recovery
Benzo(g,h,i)perylene	448	500	89.6%

Semivolatile Surrogate	Recovery
d5-Nitrobenzene	73.2%
2-Fluorobiphenyl	71.6%
d14-p-Terphenyl	80.0%
d4-1,2-Dichlorobenzene	62.4%
d5-Phenol	78.9%
2-Fluorophenol	66.4%
2,4,6-Tribromophenol	83.5%
d4-2-Chlorophenol	72.0%

Results reported in µg/kg

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

JO17MBS1

Lab Name: ANALYTICAL RESOURCES, INC
Client: G&G

ARI Job No: JO17
Project: KLAMATH RIVER SEDIME

Lab File ID: JO17MB
Date Extracted: 07/07/06

Instrument ID: NT4
Date Analyzed: 07/13/06

Matrix: SOLID
Time Analyzed: 1044

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	JO17LCSS1	JO17LCSS1	JO17SB	07/13/06
02	IG2-S1	JO17A	JO17A2	07/13/06
03	IG1-S1	JO18A	JO18A2	07/13/06
04	IG9-S1	JO18B	JO18B2	07/13/06
05	IG7-S1	JO18C	JO18C2	07/13/06
06	IG3-S1	JO43A	JO43A2	07/13/06
07	IG8-S1	JO43B	JO43B2	07/13/06
08	IG4-S1	JO43C	JO43C2	07/13/06
09	C3-S1	JO60A	JO60A2	07/13/06
10	IG2-S1 MS	JO17AMS	JO17AMS2	07/14/06
11	IG2-S1 MSD	JO17AMSD	JO17AMD2	07/14/06
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COMMENTS:

page 1 of 1

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-070706
METHOD BLANK

Lab Sample ID: MB-070706
LIMS ID: 06-11567
Matrix: Sediment
Data Release Authorized: VTS
Reported: 07/17/06

QC Report No: J017-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003
Date Sampled: NA
Date Received: NA

Date Extracted: 07/07/06
Date Analyzed: 07/13/06 10:44
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-070706
METHOD BLANK

Lab Sample ID: MB-070706
LIMS ID: 06-11567
Matrix: Sediment
Date Analyzed: 07/13/06 10:44

QC Report No: JO17-G & G Associates
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-003

CAS Number	Analyte	RL	Result
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**14 J**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.2%	2-Fluorobiphenyl	70.8%
d14-p-Terphenyl	81.2%	d4-1,2-Dichlorobenzene	65.6%
d5-Phenol	77.1%	2-Fluorophenol	68.0%
2,4,6-Tribromophenol	72.5%	d4-2-Chlorophenol	72.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG7-S1
REEXTRACT

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/19/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/17/06
Date Analyzed: 07/18/06 19:53
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 11.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 71.8%
pH: 7.3

CAS Number	Analyte	RL	Result
108-95-2	Phenol	44	< 44 U
111-44-4	Bis-(2-Chloroethyl) Ether	44	< 44 U
95-57-8	2-Chlorophenol	44	< 44 U
541-73-1	1,3-Dichlorobenzene	44	< 44 U
106-46-7	1,4-Dichlorobenzene	44	< 44 U
100-51-6	Benzyl Alcohol	44	< 44 U
95-50-1	1,2-Dichlorobenzene	44	< 44 U
95-48-7	2-Methylphenol	44	< 44 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	44	< 44 U
106-44-5	4-Methylphenol	44	< 44 U
621-64-7	N-Nitroso-Di-N-Propylamine	220	< 220 U
67-72-1	Hexachloroethane	44	< 44 U
98-95-3	Nitrobenzene	44	< 44 U
78-59-1	Isophorone	44	< 44 U
88-75-5	2-Nitrophenol	220	< 220 U
105-67-9	2,4-Dimethylphenol	44	< 44 U
65-85-0	Benzoic Acid	440	< 440 U
111-91-1	bis(2-Chloroethoxy) Methane	44	< 44 U
120-83-2	2,4-Dichlorophenol	220	< 220 U
120-82-1	1,2,4-Trichlorobenzene	44	< 44 U
91-20-3	Naphthalene	44	< 44 U
106-47-8	4-Chloroaniline	220	< 220 U
87-68-3	Hexachlorobutadiene	44	< 44 U
59-50-7	4-Chloro-3-methylphenol	220	< 220 U
91-57-6	2-Methylnaphthalene	44	< 44 U
77-47-4	Hexachlorocyclopentadiene	220	< 220 U
88-06-2	2,4,6-Trichlorophenol	220	< 220 U
95-95-4	2,4,5-Trichlorophenol	220	< 220 U
91-58-7	2-Chloronaphthalene	44	< 44 U
88-74-4	2-Nitroaniline	220	< 220 U
131-11-3	Dimethylphthalate	44	< 44 U
208-96-8	Acenaphthylene	44	< 44 U
99-09-2	3-Nitroaniline	220	< 220 U
83-32-9	Acenaphthene	44	< 44 U
51-28-5	2,4-Dinitrophenol	440	< 440 U
100-02-7	4-Nitrophenol	220	< 220 U
132-64-9	Dibenzofuran	44	< 44 U
606-20-2	2,6-Dinitrotoluene	220	< 220 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: IG7-S1
REEXTRACT

Lab Sample ID: JO18C
LIMS ID: 06-11572
Matrix: Sediment
Date Analyzed: 07/18/06 19:53

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	220	< 220 U
84-66-2	Diethylphthalate	44	< 44 U
7005-72-3	4-Chlorophenyl-phenylether	44	< 44 U
86-73-7	Fluorene	44	< 44 U
100-01-6	4-Nitroaniline	220	< 220 U
534-52-1	4,6-Dinitro-2-Methylphenol	440	< 440 U
86-30-6	N-Nitrosodiphenylamine	44	< 44 U
101-55-3	4-Bromophenyl-phenylether	44	< 44 U
118-74-1	Hexachlorobenzene	44	< 44 U
87-86-5	Pentachlorophenol	220	< 220 U
85-01-8	Phenanthrene	44	< 44 U
86-74-8	Carbazole	44	< 44 U
120-12-7	Anthracene	44	< 44 U
84-74-2	**Di-n-Butylphthalate**	**44**	**120 B**
206-44-0	Fluoranthene	44	< 44 U
129-00-0	Pyrene	44	< 44 U
85-68-7	Butylbenzylphthalate	44	< 44 U
91-94-1	3,3'-Dichlorobenzidine	220	< 220 U
56-55-3	Benzo(a)anthracene	44	< 44 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**44**	**180 B**
218-01-9	Chrysene	44	< 44 U
117-84-0	Di-n-Octyl phthalate	44	< 44 U
205-99-2	Benzo(b)fluoranthene	44	< 44 U
207-08-9	Benzo(k)fluoranthene	44	< 44 U
50-32-8	Benzo(a)pyrene	44	< 44 U
193-39-5	Indeno(1,2,3-cd)pyrene	44	< 44 U
53-70-3	Dibenz(a,h)anthracene	44	< 44 U
191-24-2	Benzo(g,h,i)perylene	44	< 44 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	70.0%	2-Fluorobiphenyl	68.4%
d14-p-Terphenyl	63.2%	d4-1,2-Dichlorobenzene	54.8%
d5-Phenol	70.9%	2-Fluorophenol	70.4%
2,4,6-Tribromophenol	74.1%	d4-2-Chlorophenol	65.1%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-071706	64.0%	60.4%	83.6%	52.4%	72.5%	72.3%	69.1%	65.6%	0
LCS-071706	66.8%	66.4%	84.4%	54.0%	70.4%	69.6%	76.0%	64.0%	0
IG7-S1	20.1%*	20.6%*	19.9%	16.0%*	23.5%*	20.0%*	24.6%	20.3%*	6
IG7-S1 RE	70.0%	68.4%	63.2%	54.8%	70.9%	70.4%	74.1%	65.1%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-11572 to 06-11572

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-071706
LAB CONTROL

Lab Sample ID: LCS-071706
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/19/06

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: 06/27/06
Date Received: 06/29/06

Date Extracted: 07/17/06
Date Analyzed: 07/18/06 17:14
Instrument/Analyst: NT4/LJR
GPC Cleanup: NO

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	346	500	69.2%
Bis-(2-Chloroethyl) Ether	370	500	74.0%
2-Chlorophenol	345	500	69.0%
1,3-Dichlorobenzene	303	500	60.6%
1,4-Dichlorobenzene	296	500	59.2%
Benzyl Alcohol	359	500	71.8%
1,2-Dichlorobenzene	312	500	62.4%
2-Methylphenol	380	500	76.0%
2,2'-Oxybis(1-Chloropropane)	462	500	92.4%
4-Methylphenol	772	1000	77.2%
N-Nitroso-Di-N-Propylamine	383	500	76.6%
Hexachloroethane	294	500	58.8%
Nitrobenzene	352	500	70.4%
Isophorone	371	500	74.2%
2-Nitrophenol	360	500	72.0%
2,4-Dimethylphenol	345	500	69.0%
Benzoic Acid	317	500	63.4%
bis(2-Chloroethoxy) Methane	371	500	74.2%
2,4-Dichlorophenol	345	500	69.0%
1,2,4-Trichlorobenzene	309	500	61.8%
Naphthalene	321	500	64.2%
4-Chloroaniline	573	1200	47.8%
Hexachlorobutadiene	287	500	57.4%
4-Chloro-3-methylphenol	371	500	74.2%
2-Methylnaphthalene	329	500	65.8%
Hexachlorocyclopentadiene	282	500	56.4%
2,4,6-Trichlorophenol	391	500	78.2%
2,4,5-Trichlorophenol	388	500	77.6%
2-Chloronaphthalene	366	500	73.2%
2-Nitroaniline	455	500	91.0%
Dimethylphthalate	382	500	76.4%
Acenaphthylene	372	500	74.4%
3-Nitroaniline	784	1280	61.2%
Acenaphthene	370	500	74.0%
2,4-Dinitrophenol	659	500	132%
4-Nitrophenol	358	500	71.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-071706
LAB CONTROL

Lab Sample ID: LCS-071706
LIMS ID: 06-11572
Matrix: Sediment
Date Analyzed: 07/18/06 17:14

QC Report No: JO18-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

Analyte	Lab Control	Spike Added	Recovery
Dibenzofuran	373	500	74.6%
2,6-Dinitrotoluene	399	500	79.8%
2,4-Dinitrotoluene	398	500	79.6%
Diethylphthalate	383	500	76.6%
4-Chlorophenyl-phenylether	363	500	72.6%
Fluorene	360	500	72.0%
4-Nitroaniline	301	500	60.2%
4,6-Dinitro-2-Methylphenol	494	500	98.8%
N-Nitrosodiphenylamine	392	500	78.4%
4-Bromophenyl-phenylether	388	500	77.6%
Hexachlorobenzene	358	500	71.6%
Pentachlorophenol	348	500	69.6%
Phenanthrene	379	500	75.8%
Carbazole	392	500	78.4%
Anthracene	359	500	71.8%
Di-n-Butylphthalate	438	500	87.6%
Fluoranthene	388	500	77.6%
Pyrene	449	500	89.8%
Butylbenzylphthalate	433	500	86.6%
3,3'-Dichlorobenzidine	547	1280	42.7%
Benzo(a)anthracene	393	500	78.6%
bis(2-Ethylhexyl)phthalate	490	500	98.0%
Chrysene	388	500	77.6%
Di-n-Octyl phthalate	416	500	83.2%
Benzo(b)fluoranthene	412	500	82.4%
Benzo(k)fluoranthene	444	500	88.8%
Benzo(a)pyrene	401	500	80.2%
Indeno(1,2,3-cd)pyrene	399	500	79.8%
Dibenz(a,h)anthracene	400	500	80.0%
Benzo(g,h,i)perylene	414	500	82.8%

Semivolatile Surrogate Recovery	
d5-Nitrobenzene	66.8%
2-Fluorobiphenyl	66.4%
d14-p-Terphenyl	84.4%
d4-1,2-Dichlorobenzene	54.0%
d5-Phenol	70.4%
2-Fluorophenol	69.6%
2,4,6-Tribromophenol	76.0%
d4-2-Chlorophenol	64.0%

Results reported in µg/kg

4B
SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

JO18MBS2

Lab Name: ANALYTICAL RESOURCES, INC

Client: G&G

ARI Job No: JO18

Project: KLAMATH RIVER SEDIME

Lab File ID: JO18MB

Date Extracted: 07/17/06

Instrument ID: NT4

Date Analyzed: 07/18/06

Matrix: SOLID

Time Analyzed: 1642

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	JO18LCSS2	JO18LCSS2	JO18SB	07/18/06
02	IG7-S1	JO18CRE	JO18CRE	07/18/06
03				
04				
05				
06				
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COMMENTS:

page 1 of 1

FORM IV SV

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-071706
METHOD BLANK

Lab Sample ID: MB-071706
LIMS ID: 06-11572
Matrix: Sediment
Data Release Authorized:
Reported: 07/19/06

QC Report No: J018-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/17/06
Date Analyzed: 07/18/06 16:42
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-071706
METHOD BLANK

Lab Sample ID: MB-071706
LIMS ID: 06-11572
Matrix: Sediment
Date Analyzed: 07/18/06 16:42

QC Report No: J018-GEC
Project: KLAMATH RIVER SEDIMENT STUDY
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**81**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**12 J**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.0%	2-Fluorobiphenyl	60.4%
d14-p-Terphenyl	83.6%	d4-1,2-Dichlorobenzene	52.4%
d5-Phenol	72.5%	2-Fluorophenol	72.3%
2,4,6-Tribromophenol	69.1%	d4-2-Chlorophenol	65.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 19:57
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 77.1%
pH: 7.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**310**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	**Benzoic Acid**	**200**	**140 J**
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**34**
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	**Acenaphthylene**	**20**	**14 J**
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Date Analyzed: 07/27/06 19:57

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	**Phenanthrene**	**20**	**27**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**20**
206-44-0	**Fluoranthene**	**20**	**30**
129-00-0	**Pyrene**	**20**	**27**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**100**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.4%	2-Fluorobiphenyl	57.2%
d14-p-Terphenyl	55.6%	d4-1,2-Dichlorobenzene	44.4%
d5-Phenol	57.1%	2-Fluorophenol	66.4%
2,4,6-Tribromophenol	72.5%	d4-2-Chlorophenol	55.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-3,S-1
SAMPLE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 20:29
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 15.6%
pH: 8.1

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**220**
621-64-7	N-Nitroso-Di-N-Propylamine	98	< 98 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	98	< 98 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	98	< 98 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	98	< 98 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	98	< 98 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	98	< 98 U
88-06-2	2,4,6-Trichlorophenol	98	< 98 U
95-95-4	2,4,5-Trichlorophenol	98	< 98 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	98	< 98 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	98	< 98 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	98	< 98 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	98	< 98 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-3,S-1
SAMPLE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Date Analyzed: 07/27/06 20:29

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	98	< 98 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	98	< 98 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	98	< 98 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**17 J**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	98	< 98 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**12 J**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.8%	2-Fluorobiphenyl	72.8%
d14-p-Terphenyl	67.2%	d4-1,2-Dichlorobenzene	60.8%
d5-Phenol	68.3%	2-Fluorophenol	82.1%
2,4,6-Tribromophenol	85.9%	d4-2-Chlorophenol	67.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-5,S-1
SAMPLE

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 21:00
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.6 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 53.9%
pH: 7.7

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**270**
621-64-7	N-Nitroso-Di-N-Propylamine	98	< 98 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	98	< 98 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	98	< 98 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**22**
106-47-8	4-Chloroaniline	98	< 98 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	98	< 98 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	98	< 98 U
88-06-2	2,4,6-Trichlorophenol	98	< 98 U
95-95-4	2,4,5-Trichlorophenol	98	< 98 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	98	< 98 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	98	< 98 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	98	< 98 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	98	< 98 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-5,S-1
SAMPLE

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Date Analyzed: 07/27/06 21:00

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	98	< 98 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	98	< 98 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	98	< 98 U
85-01-8	**Phenanthrene**	**20**	**18 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**12 J**
206-44-0	**Fluoranthene**	**20**	**20**
129-00-0	**Pyrene**	**20**	**18 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	98	< 98 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**100**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	71.2%	2-Fluorobiphenyl	66.4%
d14-p-Terphenyl	63.2%	d4-1,2-Dichlorobenzene	57.2%
d5-Phenol	68.5%	2-Fluorophenol	81.3%
2,4,6-Tribromophenol	83.7%	d4-2-Chlorophenol	65.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 21:32
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 70.2%
pH: 7.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**130**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	**Naphthalene**	**20**	**12 J**
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Date Analyzed: 07/27/06 21:32

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	**Phenanthrene**	**20**	**12 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**12 J**
129-00-0	**Pyrene**	**20**	**13 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**80**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	60.4%	2-Fluorobiphenyl	56.8%
d14-p-Terphenyl	54.4%	d4-1,2-Dichlorobenzene	46.0%
d5-Phenol	56.8%	2-Fluorophenol	67.7%
2,4,6-Tribromophenol	68.8%	d4-2-Chlorophenol	55.7%

FORM I

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-072506	79.6%	76.4%	83.6%	69.2%	84.5%	101%*	80.8%	77.6%	1
LCS-072506	74.8%	71.6%	80.4%	61.6%	82.9%	92.0%*	80.0%	73.3%	1
J-1,S-1	58.4%	57.2%	55.6%	44.4%	57.1%	66.4%	72.5%	55.2%	0
J-3,S-1	72.8%	72.8%	67.2%	60.8%	68.3%	82.1%	85.9%	67.5%	0
J-5,S-1	71.2%	66.4%	63.2%	57.2%	68.5%	81.3%	83.7%	65.6%	0
J-4,S-1	60.4%	56.8%	54.4%	46.0%	56.8%	67.7%	68.8%	55.7%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-12485 to 06-12488

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 11:29
Instrument/Analyst: NT4/LJR
GPC Cleanup: NO

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	410	500	82.0%
Bis-(2-Chloroethyl) Ether	411	500	82.2%
2-Chlorophenol	378	500	75.6%
1,3-Dichlorobenzene	321	500	64.2%
1,4-Dichlorobenzene	324	500	64.8%
Benzyl Alcohol	354	500	70.8%
1,2-Dichlorobenzene	332	500	66.4%
2-Methylphenol	396	500	79.2%
2,2'-Oxybis(1-Chloropropane)	482	500	96.4%
4-Methylphenol	835	1000	83.5%
N-Nitroso-Di-N-Propylamine	389	500	77.8%
Hexachloroethane	321	500	64.2%
Nitrobenzene	378	500	75.6%
Isophorone	397	500	79.4%
2-Nitrophenol	385	500	77.0%
2,4-Dimethylphenol	352	500	70.4%
Benzoic Acid	484	500	96.8%
bis(2-Chloroethoxy) Methane	397	500	79.4%
2,4-Dichlorophenol	378	500	75.6%
1,2,4-Trichlorobenzene	328	500	65.6%
Naphthalene	350	500	70.0%
4-Chloroaniline	366	1200	30.5%
Hexachlorobutadiene	309	500	61.8%
4-Chloro-3-methylphenol	391	500	78.2%
2-Methylnaphthalene	364	500	72.8%
Hexachlorocyclopentadiene	296	500	59.2%
2,4,6-Trichlorophenol	413	500	82.6%
2,4,5-Trichlorophenol	404	500	80.8%
2-Chloronaphthalene	380	500	76.0%
2-Nitroaniline	473	500	94.6%
Dimethylphthalate	395	500	79.0%
Acenaphthylene	367	500	73.4%
3-Nitroaniline	721	1280	56.3%
Acenaphthene	384	500	76.8%
2,4-Dinitrophenol	868	500	174%
4-Nitrophenol	330	500	66.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12485
Matrix: Sediment
Date Analyzed: 07/27/06 11:29

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

Analyte	Lab Control	Spike Added	Recovery
Dibenzofuran	391	500	78.2%
2,6-Dinitrotoluene	409	500	81.8%
2,4-Dinitrotoluene	407	500	81.4%
Diethylphthalate	393	500	78.6%
4-Chlorophenyl-phenylether	382	500	76.4%
Fluorene	381	500	76.2%
4-Nitroaniline	332	500	66.4%
4,6-Dinitro-2-Methylphenol	564	500	113%
N-Nitrosodiphenylamine	398	500	79.6%
4-Bromophenyl-phenylether	415	500	83.0%
Hexachlorobenzene	404	500	80.8%
Pentachlorophenol	452	500	90.4%
Phenanthrene	417	500	83.4%
Carbazole	408	500	81.6%
Anthracene	376	500	75.2%
Di-n-Butylphthalate	420	500	84.0%
Fluoranthene	423	500	84.6%
Pyrene	427	500	85.4%
Butylbenzylphthalate	418	500	83.6%
3,3'-Dichlorobenzidine	381	1280	29.8%
Benzo(a)anthracene	403	500	80.6%
bis(2-Ethylhexyl)phthalate	475	500	95.0%
Chrysene	421	500	84.2%
Di-n-Octyl phthalate	443	500	88.6%
Benzo(b)fluoranthene	464	500	92.8%
Benzo(k)fluoranthene	447	500	89.4%
Benzo(a)pyrene	404	500	80.8%
Indeno(1,2,3-cd)pyrene	392	500	78.4%
Dibenz(a,h)anthracene	479	500	95.8%
Benzo(g,h,i)perylene	478	500	95.6%

Semivolatile Surrogate Recovery	
d5-Nitrobenzene	74.8%
2-Fluorobiphenyl	71.6%
d14-p-Terphenyl	80.4%
d4-1,2-Dichlorobenzene	61.6%
d5-Phenol	82.9%
2-Fluorophenol	92.0%
2,4,6-Tribromophenol	80.0%
d4-2-Chlorophenol	73.3%

Results reported in µg/kg

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: NA
Date Received: NA

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 10:57
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12485
Matrix: Sediment
Date Analyzed: 07/27/06 10:57

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	79.6%	2-Fluorobiphenyl	76.4%
d14-p-Terphenyl	83.6%	d4-1,2-Dichlorobenzene	69.2%
d5-Phenol	84.5%	2-Fluorophenol	101%
2,4,6-Tribromophenol	80.8%	d4-2-Chlorophenol	77.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: J-1,S-1
SAMPLE

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 16:12

Sample Amount: 0.984 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 84.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	5.1	< 5.1	U
75-35-4	1,1-Dichloroethene	5.1	< 5.1	U
156-60-5	trans-1,2-Dichloroethene	5.1	< 5.1	U
67-66-3	Chloroform	5.1	< 5.1	U
71-55-6	1,1,1-Trichloroethane	5.1	< 5.1	U
79-01-6	Trichloroethene	5.1	< 5.1	U
71-43-2	Benzene	5.1	< 5.1	U
127-18-4	Tetrachloroethene	5.1	< 5.1	U
108-88-3	**Toluene**	**5.1**	**390**	
100-41-4	Ethylbenzene	5.1	< 5.1	U
1330-20-7	Total Xylenes	10	< 10	U
95-50-1	1,2-Dichlorobenzene	5.1	< 5.1	U
541-73-1	1,3-Dichlorobenzene	5.1	< 5.1	U
106-46-7	1,4-Dichlorobenzene	5.1	< 5.1	U
120-82-1	1,2,4-Trichlorobenzene	25	< 25	U
1634-04-4	Methyl tert-Butyl Ether	5.1	< 5.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	102%
Bromofluorobenzene	71.5%
d4-1,2-Dichlorobenzene	85.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: J-1,S-1
REANALYSIS

Lab Sample ID: JP75B
LIMS ID: 06-12485
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 16:39

Sample Amount: 1.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 84.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	5.0	< 5.0	U
75-35-4	1,1-Dichloroethene	5.0	< 5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	< 5.0	U
67-66-3	Chloroform	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	< 5.0	U
79-01-6	Trichloroethene	5.0	< 5.0	U
71-43-2	Benzene	5.0	< 5.0	U
127-18-4	Tetrachloroethene	5.0	< 5.0	U
108-88-3	**Toluene**	**5.0**	**340**	
100-41-4	Ethylbenzene	5.0	< 5.0	U
1330-20-7	Total Xylenes	10	< 10	U
95-50-1	1,2-Dichlorobenzene	5.0	< 5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	< 5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	< 5.0	U
120-82-1	1,2,4-Trichlorobenzene	25	< 25	U
1634-04-4	Methyl tert-Butyl Ether	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	103%
Bromofluorobenzene	69.1%
d4-1,2-Dichlorobenzene	90.5%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: J-3,S-1
SAMPLE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 17:05

Sample Amount: 4.93 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 22.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	**Vinyl Chloride**	**1.0**	**1.1**	
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	**Toluene**	**1.0**	**3.6**	
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.1	< 5.1	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	111%
Bromofluorobenzene	86.1%
d4-1,2-Dichlorobenzene	96.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: J-5,S-1
SAMPLE

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 17:31

Sample Amount: 2.39 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 62.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.1	< 2.1	U
75-35-4	1,1-Dichloroethene	2.1	< 2.1	U
156-60-5	trans-1,2-Dichloroethene	2.1	< 2.1	U
67-66-3	Chloroform	2.1	< 2.1	U
71-55-6	1,1,1-Trichloroethane	2.1	< 2.1	U
79-01-6	Trichloroethene	2.1	< 2.1	U
71-43-2	Benzene	2.1	< 2.1	U
127-18-4	Tetrachloroethene	2.1	< 2.1	U
108-88-3	Toluene	2.1	< 2.1	U
100-41-4	Ethylbenzene	2.1	< 2.1	U
1330-20-7	Total Xylenes	4.2	< 4.2	U
95-50-1	1,2-Dichlorobenzene	2.1	< 2.1	U
541-73-1	1,3-Dichlorobenzene	2.1	< 2.1	U
106-46-7	1,4-Dichlorobenzene	2.1	< 2.1	U
120-82-1	1,2,4-Trichlorobenzene	10	< 10	U
1634-04-4	Methyl tert-Butyl Ether	2.1	< 2.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	104%
Bromofluorobenzene	77.2%
d4-1,2-Dichlorobenzene	93.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: J-5,S-1
REANALYSIS

Lab Sample ID: JP75D
LIMS ID: 06-12487
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 17:57

Sample Amount: 2.38 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 62.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.1	< 2.1	U
75-35-4	1,1-Dichloroethene	2.1	< 2.1	U
156-60-5	trans-1,2-Dichloroethene	2.1	< 2.1	U
67-66-3	Chloroform	2.1	< 2.1	U
71-55-6	1,1,1-Trichloroethane	2.1	< 2.1	U
79-01-6	Trichloroethene	2.1	< 2.1	U
71-43-2	Benzene	2.1	< 2.1	U
127-18-4	Tetrachloroethene	2.1	< 2.1	U
108-88-3	Toluene	2.1	< 2.1	U
100-41-4	Ethylbenzene	2.1	< 2.1	U
1330-20-7	Total Xylenes	4.2	< 4.2	U
95-50-1	1,2-Dichlorobenzene	2.1	< 2.1	U
541-73-1	1,3-Dichlorobenzene	2.1	< 2.1	U
106-46-7	1,4-Dichlorobenzene	2.1	< 2.1	U
120-82-1	1,2,4-Trichlorobenzene	10	< 10	U
1634-04-4	Methyl tert-Butyl Ether	2.1	< 2.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	109%
Bromofluorobenzene	74.2%
d4-1,2-Dichlorobenzene	96.5%

ANALYTICAL RESOURCES INCORPORATED

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Sample ID: J-4,S-1
SAMPLE

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 18:24

Sample Amount: 1.97 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 68.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.5	< 2.5	U
75-35-4	1,1-Dichloroethene	2.5	< 2.5	U
156-60-5	trans-1,2-Dichloroethene	2.5	< 2.5	U
67-66-3	Chloroform	2.5	< 2.5	U
71-55-6	1,1,1-Trichloroethane	2.5	< 2.5	U
79-01-6	Trichloroethene	2.5	< 2.5	U
71-43-2	Benzene	2.5	< 2.5	U
127-18-4	Tetrachloroethene	2.5	< 2.5	U
108-88-3	Toluene	2.5	< 2.5	U
100-41-4	Ethylbenzene	2.5	< 2.5	U
1330-20-7	Total Xylenes	5.1	< 5.1	U
95-50-1	1,2-Dichlorobenzene	2.5	< 2.5	U
541-73-1	1,3-Dichlorobenzene	2.5	< 2.5	U
106-46-7	1,4-Dichlorobenzene	2.5	< 2.5	U
120-82-1	1,2,4-Trichlorobenzene	13	< 13	U
1634-04-4	Methyl tert-Butyl Ether	2.5	< 2.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	110%
Bromofluorobenzene	78.8%
d4-1,2-Dichlorobenzene	92.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: J-4,S-1
REANALYSIS

Lab Sample ID: JP75E
LIMS ID: 06-12488
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/14/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 18:50

Sample Amount: 1.95 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 68.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.6	< 2.6	U
75-35-4	1,1-Dichloroethene	2.6	< 2.6	U
156-60-5	trans-1,2-Dichloroethene	2.6	< 2.6	U
67-66-3	Chloroform	2.6	< 2.6	U
71-55-6	1,1,1-Trichloroethane	2.6	< 2.6	U
79-01-6	Trichloroethene	2.6	< 2.6	U
71-43-2	Benzene	2.6	< 2.6	U
127-18-4	Tetrachloroethene	2.6	< 2.6	U
108-88-3	Toluene	2.6	< 2.6	U
100-41-4	Ethylbenzene	2.6	< 2.6	U
1330-20-7	Total Xylenes	5.1	< 5.1	U
95-50-1	1,2-Dichlorobenzene	2.6	< 2.6	U
541-73-1	1,3-Dichlorobenzene	2.6	< 2.6	U
106-46-7	1,4-Dichlorobenzene	2.6	< 2.6	U
120-82-1	1,2,4-Trichlorobenzene	13	< 13	U
1634-04-4	Methyl tert-Butyl Ether	2.6	< 2.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	106%
Bromofluorobenzene	75.3%
d4-1,2-Dichlorobenzene	91.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-11**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP75F
LIMS ID: 06-12489
Matrix: Water
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 06/22/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 15:46

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in μg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	109%
Bromofluorobenzene	93.9%
d4-1,2-Dichlorobenzene	96.4%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
JP75B	J-1,S-1	Low	107%	102%	71.5%	85.6%	0
JP75BRE	J-1,S-1	Low	111%	103%	69.1%	90.5%	0
MB-072406	Method Blank	Low	115%	110%	96.6%	93.8%	0
LCS-072406	Lab Control	Low	111%	112%	100%	93.2%	0
LCSD-072406	Lab Control Dup	Low	106%	110%	99.1%	95.6%	0
JP75C	J-3,S-1	Low	112%	111%	86.1%	96.0%	0
JP75CMS	J-3,S-1	Low	104%	114%	94.3%	93.1%	0
JP75CMSD	J-3,S-1	Low	104%	113%	96.8%	94.2%	0
JP75D	J-5,S-1	Low	112%	104%	77.2%	93.6%	0
JP75DRE	J-5,S-1	Low	111%	109%	74.2%	96.5%	0
JP75E	J-4,S-1	Low	112%	110%	78.8%	92.6%	0
JP75ERE	J-4,S-1	Low	109%	106%	75.3%	91.4%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12485 to 06-12488

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP75F	TRIP BLANK-11	5	115%	109%	93.9%	96.4%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12489 to 06-12489

ANALYTICAL RESOURCES INCORPORATED

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Volatiles by Purge & Trap GC/MS
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Sample ID: J-3,S-1
MATRIX SPIKE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/24/06 19:16
MSD: 07/24/06 19:43

Sample Amount MS: 5.18 g-dry-wt
MSD: 4.79 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 22.0%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	1.1	46.6	48.3	94.2%	47.3	52.2	88.5%	1.5%
1,1-Dichloroethene	< 1.0 U	55.9	48.3	116%	59.8	52.2	115%	6.7%
trans-1,2-Dichloroethene	< 1.0 U	48.4	48.3	100%	53.1	52.2	102%	9.3%
Chloroform	< 1.0 U	53.8	48.3	111%	58.3	52.2	112%	8.0%
1,1,1-Trichloroethane	< 1.0 U	48.9	48.3	101%	53.7	52.2	103%	9.4%
Trichloroethene	< 1.0 U	49.4	48.3	102%	54.2	52.2	104%	9.3%
Benzene	< 1.0 U	50.6	48.3	105%	56.3	52.2	108%	10.7%
Tetrachloroethene	< 1.0 U	47.9	48.3	99.2%	53.5	52.2	102%	11.0%
Toluene	3.6	55.1	48.3	107%	59.1	52.2	106%	7.0%
Ethylbenzene	< 1.0 U	52.2	48.3	108%	58.2	52.2	111%	10.9%
Total Xylenes	< 2.0 U	144	145	99.3%	144	157	91.7%	0.0%
1,2-Dichlorobenzene	< 1.0 U	43.9	48.3	90.9%	47.6	52.2	91.2%	8.1%
1,3-Dichlorobenzene	< 1.0 U	44.9	48.3	93.0%	49.3	52.2	94.4%	9.3%
1,4-Dichlorobenzene	< 1.0 U	44.7	48.3	92.5%	48.9	52.2	93.7%	9.0%
1,2,4-Trichlorobenzene	< 5.1 U	29.7	48.3	61.5%	33.5	52.2	64.2%	12.0%
Methyl tert-Butyl Ether	< 1.0 U	46.2	48.3	95.7%	52.2	52.2	100%	12.2%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

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Sample ID: J-3,S-1
MATRIX SPIKE

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 19:16

Sample Amount: 5.18 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 22.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	---	
75-35-4	1,1-Dichloroethene	1.0	---	
156-60-5	trans-1,2-Dichloroethene	1.0	---	
67-66-3	Chloroform	1.0	---	
71-55-6	1,1,1-Trichloroethane	1.0	---	
79-01-6	Trichloroethene	1.0	---	
71-43-2	Benzene	1.0	---	
127-18-4	Tetrachloroethene	1.0	---	
108-88-3	Toluene	1.0	---	
100-41-4	Ethylbenzene	1.0	---	
1330-20-7	Total Xylenes	1.9	---	
95-50-1	1,2-Dichlorobenzene	1.0	---	
541-73-1	1,3-Dichlorobenzene	1.0	---	
106-46-7	1,4-Dichlorobenzene	1.0	---	
120-82-1	1,2,4-Trichlorobenzene	4.8	---	
1634-04-4	Methyl tert-Butyl Ether	1.0	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	114%
Bromofluorobenzene	94.3%
d4-1,2-Dichlorobenzene	93.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: J-3,S-1
MATRIX SPIKE DUP

Lab Sample ID: JP75C
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: 07/13/06
Date Received: 07/17/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 19:43

Sample Amount: 4.79 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 22.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	---	
75-35-4	1,1-Dichloroethene	1.0	---	
156-60-5	trans-1,2-Dichloroethene	1.0	---	
67-66-3	Chloroform	1.0	---	
71-55-6	1,1,1-Trichloroethane	1.0	---	
79-01-6	Trichloroethene	1.0	---	
71-43-2	Benzene	1.0	---	
127-18-4	Tetrachloroethene	1.0	---	
108-88-3	Toluene	1.0	---	
100-41-4	Ethylbenzene	1.0	---	
1330-20-7	Total Xylenes	2.1	---	
95-50-1	1,2-Dichlorobenzene	1.0	---	
541-73-1	1,3-Dichlorobenzene	1.0	---	
106-46-7	1,4-Dichlorobenzene	1.0	---	
120-82-1	1,2,4-Trichlorobenzene	5.2	---	
1634-04-4	Methyl tert-Butyl Ether	1.0	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	113%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	94.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
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Sample ID: LCS-072406
LAB CONTROL SAMPLE

Lab Sample ID: LCS-072406
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/24/06 10:04
LCSD: 07/24/06 10:41

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	43.2	50.0	86.4%	42.1	50.0	84.2%	2.6%
1,1-Dichloroethene	54.6	50.0	109%	51.7	50.0	103%	5.5%
trans-1,2-Dichloroethene	54.0	50.0	108%	52.8	50.0	106%	2.2%
Chloroform	56.6	50.0	113%	54.9	50.0	110%	3.0%
1,1,1-Trichloroethane	59.4	50.0	119%	57.0	50.0	114%	4.1%
Trichloroethene	56.6	50.0	113%	55.0	50.0	110%	2.9%
Benzene	52.1	50.0	104%	51.1	50.0	102%	1.9%
Tetrachloroethene	56.3	50.0	113%	53.6	50.0	107%	4.9%
Toluene	57.9	50.0	116%	57.1	50.0	114%	1.4%
Ethylbenzene	60.2	50.0	120%	59.5	50.0	119%	1.2%
Total Xylenes	173	150	115%	167	150	111%	3.5%
1,2-Dichlorobenzene	56.5	50.0	113%	55.6	50.0	111%	1.6%
1,3-Dichlorobenzene	58.0	50.0	116%	56.4	50.0	113%	2.8%
1,4-Dichlorobenzene	58.1	50.0	116%	57.0	50.0	114%	1.9%
1,2,4-Trichlorobenzene	57.2	50.0	114%	57.6	50.0	115%	0.7%
Methyl tert-Butyl Ether	55.3	50.0	111%	54.0	50.0	108%	2.4%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	111%	106%
d8-Toluene	112%	110%
Bromofluorobenzene	100%	99.1%
d4-1,2-Dichlorobenzene	93.2%	95.6%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0724

Lab Name: ANALYTICAL RESOURCES, INC Contract: GEC

Lab Code: JP75 Case No.: KLAMATH RIVER SDG No.: JP75

Lab File ID: MB0724 Lab Sample ID: MB0724

Date Analyzed: 07/24/06 Time Analyzed: 1107

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0724	LCS0724	LCS0724	1004
02	LCS0724	LCS0724	LCS0724A	1041
03	TRIP BLANK-1	JP75F	JP75F	1546
04	J-1,S-1	JP75B	JP75B	1612
05	J-1,S-1	JP75B	JP75B2	1639
06	J-3,S-1	JP75C	JP75C	1705
07	J-5,S-1	JP75D	JP75D	1731
08	J-5,S-1	JP75D	JP75D2	1757
09	J-4,S-1	JP75E	JP75E	1824
10	J-4,S-1	JP75E	JP75E2	1850
11	J-3,S-1	JP75C	JP75CMS	1916
12	J-3,S-1	JP75C	JP75CMD	1943
13				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: MB-072406
METHOD BLANK

Lab Sample ID: MB-072406
LIMS ID: 06-12486
Matrix: Sediment
Data Release Authorized:
Reported: 07/26/06

QC Report No: JP75-GEC
Project: Klamath River Sediment Study
21-1-12195-003
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/24/06 11:07

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	110%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	93.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 17:50
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 67.6%
pH: 6.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**18 J**
621-64-7	N-Nitroso-Di-N-Propylamine	99	< 99 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	**Benzoic Acid**	**200**	**350**
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	< 99 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	< 99 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Date Analyzed: 07/27/06 17:50

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	< 99 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	< 99 U
85-01-8	**Phenanthrene**	**20**	**10 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	**Fluoranthene**	**20**	**15 J**
129-00-0	**Pyrene**	**20**	**11 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	**Benzo(a)anthracene**	**20**	**10 J**
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.8%	2-Fluorobiphenyl	68.8%
d14-p-Terphenyl	54.4%	d4-1,2-Dichlorobenzene	58.4%
d5-Phenol	73.9%	2-Fluorophenol	91.5%
2,4,6-Tribromophenol	79.2%	d4-2-Chlorophenol	67.7%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/28/06 18:59
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.1 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 75.2%
pH: 7.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**21**
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	**Benzoic Acid**	**200**	**190 J**
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Date Analyzed: 07/28/06 18:59

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	**Phenanthrene**	**20**	**12 J**
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**16 J**
206-44-0	**Fluoranthene**	**20**	**14 J**
129-00-0	**Pyrene**	**20**	**12 J**
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**20**	**110**
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.4%	2-Fluorobiphenyl	70.8%
d14-p-Terphenyl	69.2%	d4-1,2-Dichlorobenzene	55.6%
d5-Phenol	82.1%	2-Fluorophenol	101%
2,4,6-Tribromophenol	85.1%	d4-2-Chlorophenol	74.4%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-072506	79.6%	76.4%	83.6%	69.2%	84.5%	101%*	80.8%	77.6%	1
LCS-072506	74.8%	71.6%	80.4%	61.6%	82.9%	92.0%*	80.0%	73.3%	1
C-12,S-2C/3C	72.8%	68.8%	54.4%	58.4%	73.9%	91.5%*	79.2%	67.7%	1
C-12,S-2C/3C MS	74.0%	68.0%	54.4%	57.2%	77.1%	92.8%*	85.6%	71.7%	1
C-12,S-2C/3C MSD	73.2%	69.2%	29.6%	58.4%	80.3%	94.1%*	82.1%	72.0%	1
C-6,S-1	74.4%	70.8%	69.2%	55.6%	82.1%	101%*	85.1%	74.4%	1

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-87)	(27-101)
(FBP) = 2-Fluorobiphenyl	(46-88)	(30-100)
(TPH) = d14-p-Terphenyl	(37-114)	(12-120)
(DCB) = d4-1,2-Dichlorobenzene	(43-82)	(24-87)
(PHL) = d5-Phenol	(47-87)	(26-99)
(2FP) = 2-Fluorophenol	(42-87)	(22-91)
(TBP) = 2,4,6-Tribromophenol	(40-97)	(20-114)
(2CP) = d4-2-Chlorophenol	(47-86)	(29-96)

Prep Method: SW3550B
Log Number Range: 06-12379 to 06-12380

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C MS/MSD

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study 21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted MS/MSD: 07/25/06

Date Analyzed MS: 07/27/06 18:22
MSD: 07/28/06 19:30
Instrument/Analyst MS: NT4/LJR
MSD: NT4/LJR
GPC Cleanup: NO

Sample Amount MS: 25.4 g-dry-wt
MSD: 25.3 g-dry-wt
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 1.00
MSD: 1.00
Percent Moisture: 67.6%
pH: 6.4

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 19.7	477	737	64.7%	509	740	68.8%	6.5%
2-Chlorophenol	< 19.7	512	737	69.5%	540	740	73.0%	5.3%
1,4-Dichlorobenzene	< 19.7	300	492	61.0%	300	493	60.9%	0.0%
N-Nitroso-Di-N-Propylamine	< 98.7	349	492	70.9%	355	493	72.0%	1.7%
1,2,4-Trichlorobenzene	< 19.7	312	492	63.4%	306	493	62.1%	1.9%
4-Chloro-3-methylphenol	< 98.7	517	737	70.1%	528	740	71.4%	2.1%
Acenaphthene	< 19.7	337	492	68.5%	344	493	69.8%	2.1%
4-Nitrophenol	< 98.7	816	737	111%	834	740	113%	2.2%
2,4-Dinitrotoluene	< 98.7	303	492	61.6%	306	493	62.1%	1.0%
Pentachlorophenol	< 98.7	631	737	85.6%	643	740	86.9%	1.9%
Pyrene	11.0	269	492	52.4%	148	493	27.8%	58.0%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: C-12,S-2C/3C
MATRIX SPIKE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 18:22
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.4 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 67.6%
pH: 6.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	---
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	---
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	---
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**25**
621-64-7	N-Nitroso-Di-N-Propylamine	98	---
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	98	< 98 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	**Benzoic Acid**	**200**	**360**
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	98	< 98 U
120-82-1	1,2,4-Trichlorobenzene	20	---
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	98	< 98 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	98	---
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	98	< 98 U
88-06-2	2,4,6-Trichlorophenol	98	< 98 U
95-95-4	2,4,5-Trichlorophenol	98	< 98 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	98	< 98 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	98	< 98 U
83-32-9	Acenaphthene	20	---
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	98	---
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	98	< 98 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-12,S-2C/3C
MATRIX SPIKE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Date Analyzed: 07/27/06 18:22

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	98	---
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	98	< 98 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	98	---
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	---
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	98	< 98 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in μg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.0%	2-Fluorobiphenyl	68.0%
d14-p-Terphenyl	54.4%	d4-1,2-Dichlorobenzene	57.2%
d5-Phenol	77.1%	2-Fluorophenol	92.8%
2,4,6-Tribromophenol	85.6%	d4-2-Chlorophenol	71.7%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-12,S-2C/3C
MATRIX SPIKE DUPLICATE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/28/06 19:30
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.3 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 67.6%
pH: 6.4

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	---
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	---
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	---
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	**4-Methylphenol**	**20**	**22**
621-64-7	N-Nitroso-Di-N-Propylamine	99	---
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	99	< 99 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	**Benzoic Acid**	**200**	**330**
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	99	< 99 U
120-82-1	1,2,4-Trichlorobenzene	20	---
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	99	< 99 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	99	---
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	99	< 99 U
88-06-2	2,4,6-Trichlorophenol	99	< 99 U
95-95-4	2,4,5-Trichlorophenol	99	< 99 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	99	< 99 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	99	< 99 U
83-32-9	Acenaphthene	20	---
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	99	---
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	99	< 99 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: C-12,S-2C/3C
MATRIX SPIKE DUPLICATE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Date Analyzed: 07/28/06 19:30

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	99	---
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	99	< 99 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	99	---
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	**Di-n-Butylphthalate**	**20**	**21**
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	---
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	99	< 99 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.2%	2-Fluorobiphenyl	69.2%
d14-p-Terphenyl	29.6%	d4-1,2-Dichlorobenzene	58.4%
d5-Phenol	80.3%	2-Fluorophenol	94.1%
2,4,6-Tribromophenol	82.1%	d4-2-Chlorophenol	72.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 11:29
Instrument/Analyst: NT4/LJR
GPC Cleanup: NO

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	410	500	82.0%
Bis-(2-Chloroethyl) Ether	411	500	82.2%
2-Chlorophenol	378	500	75.6%
1,3-Dichlorobenzene	321	500	64.2%
1,4-Dichlorobenzene	324	500	64.8%
Benzyl Alcohol	354	500	70.8%
1,2-Dichlorobenzene	332	500	66.4%
2-Methylphenol	396	500	79.2%
2,2'-Oxybis(1-Chloropropane)	482	500	96.4%
4-Methylphenol	835	1000	83.5%
N-Nitroso-Di-N-Propylamine	389	500	77.8%
Hexachloroethane	321	500	64.2%
Nitrobenzene	378	500	75.6%
Isophorone	397	500	79.4%
2-Nitrophenol	385	500	77.0%
2,4-Dimethylphenol	352	500	70.4%
Benzoic Acid	484	500	96.8%
bis(2-Chloroethoxy) Methane	397	500	79.4%
2,4-Dichlorophenol	378	500	75.6%
1,2,4-Trichlorobenzene	328	500	65.6%
Naphthalene	350	500	70.0%
4-Chloroaniline	366	1200	30.5%
Hexachlorobutadiene	309	500	61.8%
4-Chloro-3-methylphenol	391	500	78.2%
2-Methylnaphthalene	364	500	72.8%
Hexachlorocyclopentadiene	296	500	59.2%
2,4,6-Trichlorophenol	413	500	82.6%
2,4,5-Trichlorophenol	404	500	80.8%
2-Chloronaphthalene	380	500	76.0%
2-Nitroaniline	473	500	94.6%
Dimethylphthalate	395	500	79.0%
Acenaphthylene	367	500	73.4%
3-Nitroaniline	721	1280	56.3%
Acenaphthene	384	500	76.8%
2,4-Dinitrophenol	868	500	174%
4-Nitrophenol	330	500	66.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: LCS-072506
LAB CONTROL

Lab Sample ID: LCS-072506
LIMS ID: 06-12379
Matrix: Sediment
Date Analyzed: 07/27/06 11:29

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

Analyte	Lab Control	Spike Added	Recovery
Dibenzofuran	391	500	78.2%
2,6-Dinitrotoluene	409	500	81.8%
2,4-Dinitrotoluene	407	500	81.4%
Diethylphthalate	393	500	78.6%
4-Chlorophenyl-phenylether	382	500	76.4%
Fluorene	381	500	76.2%
4-Nitroaniline	332	500	66.4%
4,6-Dinitro-2-Methylphenol	564	500	113%
N-Nitrosodiphenylamine	398	500	79.6%
4-Bromophenyl-phenylether	415	500	83.0%
Hexachlorobenzene	404	500	80.8%
Pentachlorophenol	452	500	90.4%
Phenanthrene	417	500	83.4%
Carbazole	408	500	81.6%
Anthracene	376	500	75.2%
Di-n-Butylphthalate	420	500	84.0%
Fluoranthene	423	500	84.6%
Pyrene	427	500	85.4%
Butylbenzylphthalate	418	500	83.6%
3,3'-Dichlorobenzidine	381	1280	29.8%
Benzo(a)anthracene	403	500	80.6%
bis(2-Ethylhexyl)phthalate	475	500	95.0%
Chrysene	421	500	84.2%
Di-n-Octyl phthalate	443	500	88.6%
Benzo(b)fluoranthene	464	500	92.8%
Benzo(k)fluoranthene	447	500	89.4%
Benzo(a)pyrene	404	500	80.8%
Indeno(1,2,3-cd)pyrene	392	500	78.4%
Dibenz(a,h)anthracene	479	500	95.8%
Benzo(g,h,i)perylene	478	500	95.6%

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.8%
2-Fluorobiphenyl	71.6%
d14-p-Terphenyl	80.4%
d4-1,2-Dichlorobenzene	61.6%
d5-Phenol	82.9%
2-Fluorophenol	92.0%
2,4,6-Tribromophenol	80.0%
d4-2-Chlorophenol	73.3%

Results reported in μg/kg

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/31/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Date Extracted: 07/25/06
Date Analyzed: 07/27/06 10:57
Instrument/Analyst: NT4/LJR
GPC Cleanup: No

Sample Amount: 25.0 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA
pH: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	20	< 20 U
111-44-4	Bis-(2-Chloroethyl) Ether	20	< 20 U
95-57-8	2-Chlorophenol	20	< 20 U
541-73-1	1,3-Dichlorobenzene	20	< 20 U
106-46-7	1,4-Dichlorobenzene	20	< 20 U
100-51-6	Benzyl Alcohol	20	< 20 U
95-50-1	1,2-Dichlorobenzene	20	< 20 U
95-48-7	2-Methylphenol	20	< 20 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	20	< 20 U
106-44-5	4-Methylphenol	20	< 20 U
621-64-7	N-Nitroso-Di-N-Propylamine	100	< 100 U
67-72-1	Hexachloroethane	20	< 20 U
98-95-3	Nitrobenzene	20	< 20 U
78-59-1	Isophorone	20	< 20 U
88-75-5	2-Nitrophenol	100	< 100 U
105-67-9	2,4-Dimethylphenol	20	< 20 U
65-85-0	Benzoic Acid	200	< 200 U
111-91-1	bis(2-Chloroethoxy) Methane	20	< 20 U
120-83-2	2,4-Dichlorophenol	100	< 100 U
120-82-1	1,2,4-Trichlorobenzene	20	< 20 U
91-20-3	Naphthalene	20	< 20 U
106-47-8	4-Chloroaniline	100	< 100 U
87-68-3	Hexachlorobutadiene	20	< 20 U
59-50-7	4-Chloro-3-methylphenol	100	< 100 U
91-57-6	2-Methylnaphthalene	20	< 20 U
77-47-4	Hexachlorocyclopentadiene	100	< 100 U
88-06-2	2,4,6-Trichlorophenol	100	< 100 U
95-95-4	2,4,5-Trichlorophenol	100	< 100 U
91-58-7	2-Chloronaphthalene	20	< 20 U
88-74-4	2-Nitroaniline	100	< 100 U
131-11-3	Dimethylphthalate	20	< 20 U
208-96-8	Acenaphthylene	20	< 20 U
99-09-2	3-Nitroaniline	100	< 100 U
83-32-9	Acenaphthene	20	< 20 U
51-28-5	2,4-Dinitrophenol	200	< 200 U
100-02-7	4-Nitrophenol	100	< 100 U
132-64-9	Dibenzofuran	20	< 20 U
606-20-2	2,6-Dinitrotoluene	100	< 100 U

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PSDDA Semivolatiles by SW8270D GC/MS

Sample ID: MB-072506
METHOD BLANK

Lab Sample ID: MB-072506
LIMS ID: 06-12379
Matrix: Sediment
Date Analyzed: 07/27/06 10:57

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

CAS Number	Analyte	RL	Result
121-14-2	2,4-Dinitrotoluene	100	< 100 U
84-66-2	Diethylphthalate	20	< 20 U
7005-72-3	4-Chlorophenyl-phenylether	20	< 20 U
86-73-7	Fluorene	20	< 20 U
100-01-6	4-Nitroaniline	100	< 100 U
534-52-1	4,6-Dinitro-2-Methylphenol	200	< 200 U
86-30-6	N-Nitrosodiphenylamine	20	< 20 U
101-55-3	4-Bromophenyl-phenylether	20	< 20 U
118-74-1	Hexachlorobenzene	20	< 20 U
87-86-5	Pentachlorophenol	100	< 100 U
85-01-8	Phenanthrene	20	< 20 U
86-74-8	Carbazole	20	< 20 U
120-12-7	Anthracene	20	< 20 U
84-74-2	Di-n-Butylphthalate	20	< 20 U
206-44-0	Fluoranthene	20	< 20 U
129-00-0	Pyrene	20	< 20 U
85-68-7	Butylbenzylphthalate	20	< 20 U
91-94-1	3,3'-Dichlorobenzidine	100	< 100 U
56-55-3	Benzo(a)anthracene	20	< 20 U
117-81-7	bis(2-Ethylhexyl)phthalate	20	< 20 U
218-01-9	Chrysene	20	< 20 U
117-84-0	Di-n-Octyl phthalate	20	< 20 U
205-99-2	Benzo(b)fluoranthene	20	< 20 U
207-08-9	Benzo(k)fluoranthene	20	< 20 U
50-32-8	Benzo(a)pyrene	20	< 20 U
193-39-5	Indeno(1,2,3-cd)pyrene	20	< 20 U
53-70-3	Dibenz(a,h)anthracene	20	< 20 U
191-24-2	Benzo(g,h,i)perylene	20	< 20 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	79.6%	2-Fluorobiphenyl	76.4%
d14-p-Terphenyl	83.6%	d4-1,2-Dichlorobenzene	69.2%
d5-Phenol	84.5%	2-Fluorophenol	101%
2,4,6-Tribromophenol	80.8%	d4-2-Chlorophenol	77.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C3-S1
SAMPLE

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/12/06 15:32

Sample Amount: 1.60 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 75.1%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.1	< 3.1	U
75-35-4	1,1-Dichloroethene	3.1	< 3.1	U
156-60-5	trans-1,2-Dichloroethene	3.1	< 3.1	U
67-66-3	Chloroform	3.1	< 3.1	U
71-55-6	1,1,1-Trichloroethane	3.1	< 3.1	U
79-01-6	Trichloroethene	3.1	< 3.1	U
71-43-2	Benzene	3.1	< 3.1	U
127-18-4	Tetrachloroethene	3.1	< 3.1	U
108-88-3	Toluene	3.1	< 3.1	U
100-41-4	Ethylbenzene	3.1	< 3.1	U
1330-20-7	Total Xylenes	6.2	< 6.2	U
95-50-1	1,2-Dichlorobenzene	3.1	< 3.1	U
541-73-1	1,3-Dichlorobenzene	3.1	< 3.1	U
106-46-7	1,4-Dichlorobenzene	3.1	< 3.1	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.1	< 3.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	137%
d8-Toluene	99.7%
Bromofluorobenzene	86.4%
d4-1,2-Dichlorobenzene	92.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C3-S1
REANALYSIS

Lab Sample ID: JO60A
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/30/06
Date Received: 07/03/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/12/06 15:58

Sample Amount: 1.64 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 75.1%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.0	< 3.0	U
75-35-4	1,1-Dichloroethene	3.0	< 3.0	U
156-60-5	trans-1,2-Dichloroethene	3.0	< 3.0	U
67-66-3	Chloroform	3.0	< 3.0	U
71-55-6	1,1,1-Trichloroethane	3.0	< 3.0	U
79-01-6	Trichloroethene	3.0	< 3.0	U
71-43-2	Benzene	3.0	< 3.0	U
127-18-4	Tetrachloroethene	3.0	< 3.0	U
108-88-3	Toluene	3.0	< 3.0	U
100-41-4	Ethylbenzene	3.0	< 3.0	U
1330-20-7	Total Xylenes	6.1	< 6.1	U
95-50-1	1,2-Dichlorobenzene	3.0	< 3.0	U
541-73-1	1,3-Dichlorobenzene	3.0	< 3.0	U
106-46-7	1,4-Dichlorobenzene	3.0	< 3.0	U
120-82-1	1,2,4-Trichlorobenzene	15	< 15	U
1634-04-4	Methyl tert-Butyl Ether	3.0	< 3.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	143%
d8-Toluene	102%
Bromofluorobenzene	87.1%
d4-1,2-Dichlorobenzene	91.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-5**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JO60D
LIMS ID: 06-11774
Matrix: Water
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/22/06
Date Received: 07/03/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/12/06 15:05

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in μg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	135%
d8-Toluene	105%
Bromofluorobenzene	106%
d4-1,2-Dichlorobenzene	99.1%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071206	Method Blank	Low	131%	106%	107%	104%	0
LCS-071206	Lab Control	Low	121%	106%	105%	99.5%	0
LCSD-071206	Lab Control Dup	Low	126%	106%	109%	100%	0
JO60A	C3-S1	Low	137%	99.7%	86.4%	92.3%	0
JO60ARE	C3-S1	Low	143%	102%	87.1%	91.9%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-11771 to 06-11771

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JO60D	TRIP BLANK-5	5	135%	105%	106%	99.1%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-11774 to 06-11774

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: LCS-071206
LAB CONTROL SAMPLE

Lab Sample ID: LCS-071206
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: J060-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/12/06 09:55
LCSD: 07/12/06 10:33

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	63.3	50.0	127%	63.9	50.0	128%	0.9%
1,1-Dichloroethene	56.9	50.0	114%	58.7	50.0	117%	3.1%
trans-1,2-Dichloroethene	53.9	50.0	108%	57.0	50.0	114%	5.6%
Chloroform	59.6	50.0	119%	62.6	50.0	125%	4.9%
1,1,1-Trichloroethane	60.5	50.0	121%	63.4	50.0	127%	4.7%
Trichloroethene	56.8	50.0	114%	58.4	50.0	117%	2.8%
Benzene	52.0	50.0	104%	55.6	50.0	111%	6.7%
Tetrachloroethene	51.4	50.0	103%	53.8	50.0	108%	4.6%
Toluene	54.0	50.0	108%	56.9	50.0	114%	5.2%
Ethylbenzene	56.3	50.0	113%	58.2	50.0	116%	3.3%
Total Xylenes	166	150	111%	168	150	112%	1.2%
1,2-Dichlorobenzene	56.7	50.0	113%	56.9	50.0	114%	0.4%
1,3-Dichlorobenzene	56.6	50.0	113%	56.6	50.0	113%	0.0%
1,4-Dichlorobenzene	56.5	50.0	113%	56.9	50.0	114%	0.7%
1,2,4-Trichlorobenzene	56.2	50.0	112%	56.7	50.0	113%	0.9%
Methyl tert-Butyl Ether	53.7	50.0	107%	57.3	50.0	115%	6.5%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	121%	126%
d8-Toluene	106%	106%
Bromofluorobenzene	105%	109%
d4-1,2-Dichlorobenzene	99.5%	100%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0712

Lab Name: ANALYTICAL RESOURCES, INC Contract: G & G

Lab Code: JO04 Case No.: KLAMATH RIVER SEDIMENT SDG No.: JO60

Lab File ID: MB0712 Lab Sample ID: MB0712

Date Analyzed: 07/12/06 Time Analyzed: 1124

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0712	LCS0712	LCS0712	0955
02	LCS0712	LCS0712	LCS0712A	1033
03	TRIP BLANK	JO60B	JO60D	1505
04	C3-S1	JO60A	JO60A	1532
05	C3-S1	JO60A	JO60A2	1558
06				
07				
08				
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: MB-071206
METHOD BLANK

Lab Sample ID: MB-071206
LIMS ID: 06-11771
Matrix: Sediment
Data Release Authorized:
Reported: 07/13/06

QC Report No: JO60-G & G Associates
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/12/06 11:24

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	131%
d8-Toluene	106%
Bromofluorobenzene	107%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-9,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 17:51

Sample Amount: 1.57 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	Toluene	3.2	< 3.2	U
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.4	< 6.4	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	106%
Bromofluorobenzene	80.0%
d4-1,2-Dichlorobenzene	99.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-9,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP03B
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 16:14

Sample Amount: 1.50 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U
100-41-4	Ethylbenzene	3.3	< 3.3	U
1330-20-7	Total Xylenes	6.7	< 6.7	U
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	106%
Bromofluorobenzene	80.6%
d4-1,2-Dichlorobenzene	95.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 18:17

Sample Amount: 1.50 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U
100-41-4	**Ethylbenzene**	**3.3**	**43**	
1330-20-7	**Total Xylenes**	**6.6**	**220**	
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.6%
d8-Toluene	104%
Bromofluorobenzene	80.8%
d4-1,2-Dichlorobenzene	97.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 16:40

Sample Amount: 1.51 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-2,S-1
REANALYSIS

Lab Sample ID: JP03C
LIMS ID: 06-13023
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 17:12

Sample Amount: 1.47 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.4	< 3.4	U
75-35-4	1,1-Dichloroethene	3.4	< 3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	< 3.4	U
67-66-3	Chloroform	3.4	< 3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	< 3.4	U
79-01-6	Trichloroethene	3.4	< 3.4	U
71-43-2	Benzene	3.4	< 3.4	U
127-18-4	Tetrachloroethene	3.4	< 3.4	U
108-88-3	Toluene	3.4	< 3.4	U
100-41-4	Ethylbenzene	3.4	< 3.4	U
1330-20-7	Total Xylenes	6.8	< 6.8	U
95-50-1	1,2-Dichlorobenzene	3.4	< 3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	< 3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	< 3.4	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.4	< 3.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	104%
Bromofluorobenzene	77.9%
d4-1,2-Dichlorobenzene	95.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: JP03F
LIMS ID: 06-12044
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study 21-1-12195-002
Date Sampled: 07/03/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 16:32

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	113%
Bromofluorobenzene	99.2%
d4-1,2-Dichlorobenzene	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
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Sample ID: C-10,S-1
SAMPLE

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 20:37

Sample Amount: 1.55 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 76.2%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.2	< 3.2	U
75-35-4	1,1-Dichloroethene	3.2	< 3.2	U
156-60-5	trans-1,2-Dichloroethene	3.2	< 3.2	U
67-66-3	Chloroform	3.2	< 3.2	U
71-55-6	1,1,1-Trichloroethane	3.2	< 3.2	U
79-01-6	Trichloroethene	3.2	< 3.2	U
71-43-2	Benzene	3.2	< 3.2	U
127-18-4	Tetrachloroethene	3.2	< 3.2	U
108-88-3	**Toluene**	**3.2**	**3.7**	
100-41-4	Ethylbenzene	3.2	< 3.2	U
1330-20-7	Total Xylenes	6.5	< 6.5	U
95-50-1	1,2-Dichlorobenzene	3.2	< 3.2	U
541-73-1	1,3-Dichlorobenzene	3.2	< 3.2	U
106-46-7	1,4-Dichlorobenzene	3.2	< 3.2	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.2	< 3.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	109%
Bromofluorobenzene	77.3%
d4-1,2-Dichlorobenzene	98.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-10,S-1
REANALYSIS

Lab Sample ID: JP06A
LIMS ID: 06-12051
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 18:58

Sample Amount: 1.47 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 76.2%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.4	< 3.4	U
75-35-4	1,1-Dichloroethene	3.4	< 3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	< 3.4	U
67-66-3	Chloroform	3.4	< 3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	< 3.4	U
79-01-6	Trichloroethene	3.4	< 3.4	U
71-43-2	Benzene	3.4	< 3.4	U
127-18-4	Tetrachloroethene	3.4	< 3.4	U
108-88-3	Toluene	3.4	< 3.4	U
100-41-4	Ethylbenzene	3.4	< 3.4	U
1330-20-7	Total Xylenes	6.8	< 6.8	U
95-50-1	1,2-Dichlorobenzene	3.4	< 3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	< 3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	< 3.4	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.4	< 3.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	107%
Bromofluorobenzene	81.0%
d4-1,2-Dichlorobenzene	98.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-5,S-1
SAMPLE

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 21:03

Sample Amount: 1.64 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 74.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.0	< 3.0	U
75-35-4	1,1-Dichloroethene	3.0	< 3.0	U
156-60-5	trans-1,2-Dichloroethene	3.0	< 3.0	U
67-66-3	Chloroform	3.0	< 3.0	U
71-55-6	1,1,1-Trichloroethane	3.0	< 3.0	U
79-01-6	Trichloroethene	3.0	< 3.0	U
71-43-2	Benzene	3.0	< 3.0	U
127-18-4	Tetrachloroethene	3.0	< 3.0	U
108-88-3	Toluene	3.0	< 3.0	U
100-41-4	Ethylbenzene	3.0	< 3.0	U
1330-20-7	Total Xylenes	6.1	< 6.1	U
95-50-1	1,2-Dichlorobenzene	3.0	< 3.0	U
541-73-1	1,3-Dichlorobenzene	3.0	< 3.0	U
106-46-7	1,4-Dichlorobenzene	3.0	< 3.0	U
120-82-1	1,2,4-Trichlorobenzene	15	< 15	U
1634-04-4	Methyl tert-Butyl Ether	3.0	< 3.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	109%
Bromofluorobenzene	77.9%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-5,S-1
REANALYSIS

Lab Sample ID: JP06B
LIMS ID: 06-12052
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/09/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 19:24

Sample Amount: 1.60 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 74.7%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.1	< 3.1	U
75-35-4	1,1-Dichloroethene	3.1	< 3.1	U
156-60-5	trans-1,2-Dichloroethene	3.1	< 3.1	U
67-66-3	Chloroform	3.1	< 3.1	U
71-55-6	1,1,1-Trichloroethane	3.1	< 3.1	U
79-01-6	Trichloroethene	3.1	< 3.1	U
71-43-2	Benzene	3.1	< 3.1	U
127-18-4	Tetrachloroethene	3.1	< 3.1	U
108-88-3	Toluene	3.1	< 3.1	U
100-41-4	Ethylbenzene	3.1	< 3.1	U
1330-20-7	Total Xylenes	6.2	< 6.2	U
95-50-1	1,2-Dichlorobenzene	3.1	< 3.1	U
541-73-1	1,3-Dichlorobenzene	3.1	< 3.1	U
106-46-7	1,4-Dichlorobenzene	3.1	< 3.1	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.1	< 3.1	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	108%
Bromofluorobenzene	80.7%
d4-1,2-Dichlorobenzene	98.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: JP06E
LIMS ID: 06-12055
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP06-GEC
Project: Klamath River Sediment Study 21-1-12195-002
Date Sampled: 06/26/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 19:44

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in μg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	116%
Bromofluorobenzene	97.2%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 19:36

Sample Amount: 3.87 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.3	< 1.3	U
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
67-66-3	Chloroform	1.3	< 1.3	U
71-55-6	1,1,1-Trichloroethane	1.3	< 1.3	U
79-01-6	Trichloroethene	1.3	< 1.3	U
71-43-2	Benzene	1.3	< 1.3	U
127-18-4	Tetrachloroethene	1.3	< 1.3	U
108-88-3	**Toluene**	**1.3**	**440**	**E**
100-41-4	Ethylbenzene	1.3	< 1.3	U
1330-20-7	Total Xylenes	2.6	< 2.6	U
95-50-1	1,2-Dichlorobenzene	1.3	< 1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	< 1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	< 1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.5	< 6.5	U
1634-04-4	Methyl tert-Butyl Ether	1.3	< 1.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	102%
d8-Toluene	110%
Bromofluorobenzene	85.1%
d4-1,2-Dichlorobenzene	93.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 17:06

Sample Amount: 0.692 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	7.2	< 7.2	U
75-35-4	1,1-Dichloroethene	7.2	< 7.2	U
156-60-5	trans-1,2-Dichloroethene	7.2	< 7.2	U
67-66-3	Chloroform	7.2	< 7.2	U
71-55-6	1,1,1-Trichloroethane	7.2	< 7.2	U
79-01-6	Trichloroethene	7.2	< 7.2	U
71-43-2	Benzene	7.2	< 7.2	U
127-18-4	Tetrachloroethene	7.2	< 7.2	U
108-88-3	**Toluene**	**7.2**	**170**	
100-41-4	Ethylbenzene	7.2	< 7.2	U
1330-20-7	Total Xylenes	14	< 14	U
95-50-1	1,2-Dichlorobenzene	7.2	< 7.2	U
541-73-1	1,3-Dichlorobenzene	7.2	< 7.2	U
106-46-7	1,4-Dichlorobenzene	7.2	< 7.2	U
120-82-1	1,2,4-Trichlorobenzene	36	< 36	U
1634-04-4	Methyl tert-Butyl Ether	7.2	< 7.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	112%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP11E
LIMS ID: 06-13025
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 17:39

Sample Amount: 0.905 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	5.5	< 5.5	U
75-35-4	1,1-Dichloroethene	5.5	< 5.5	U
156-60-5	trans-1,2-Dichloroethene	5.5	< 5.5	U
67-66-3	Chloroform	5.5	< 5.5	U
71-55-6	1,1,1-Trichloroethane	5.5	< 5.5	U
79-01-6	Trichloroethene	5.5	< 5.5	U
71-43-2	Benzene	5.5	< 5.5	U
127-18-4	Tetrachloroethene	5.5	< 5.5	U
108-88-3	**Toluene**	**5.5**	**680**	
100-41-4	Ethylbenzene	5.5	< 5.5	U
1330-20-7	Total Xylenes	11	< 11	U
95-50-1	1,2-Dichlorobenzene	5.5	< 5.5	U
541-73-1	1,3-Dichlorobenzene	5.5	< 5.5	U
106-46-7	1,4-Dichlorobenzene	5.5	< 5.5	U
120-82-1	1,2,4-Trichlorobenzene	28	< 28	U
1634-04-4	Methyl tert-Butyl Ether	5.5	< 5.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	114%
Bromofluorobenzene	93.0%
d4-1,2-Dichlorobenzene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-1,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11F
LIMS ID: 06-12093
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 20:03

Sample Amount: 5.42 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 8.8%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	0.9	< 0.9	U
75-35-4	1,1-Dichloroethene	0.9	< 0.9	U
156-60-5	trans-1,2-Dichloroethene	0.9	< 0.9	U
67-66-3	Chloroform	0.9	< 0.9	U
71-55-6	1,1,1-Trichloroethane	0.9	< 0.9	U
79-01-6	Trichloroethene	0.9	< 0.9	U
71-43-2	Benzene	0.9	< 0.9	U
127-18-4	Tetrachloroethene	0.9	< 0.9	U
108-88-3	Toluene	0.9	< 0.9	U
100-41-4	Ethylbenzene	0.9	< 0.9	U
1330-20-7	Total Xylenes	1.8	< 1.8	U
95-50-1	1,2-Dichlorobenzene	0.9	< 0.9	U
541-73-1	1,3-Dichlorobenzene	0.9	< 0.9	U
106-46-7	1,4-Dichlorobenzene	0.9	< 0.9	U
120-82-1	1,2,4-Trichlorobenzene	4.6	< 4.6	U
1634-04-4	Methyl tert-Butyl Ether	0.9	< 0.9	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	112%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-11,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 18:25

Sample Amount: 2.17 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 66.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.3	< 2.3	U
75-35-4	1,1-Dichloroethene	2.3	< 2.3	U
156-60-5	trans-1,2-Dichloroethene	2.3	< 2.3	U
67-66-3	Chloroform	2.3	< 2.3	U
71-55-6	1,1,1-Trichloroethane	2.3	< 2.3	U
79-01-6	Trichloroethene	2.3	< 2.3	U
71-43-2	Benzene	2.3	< 2.3	U
127-18-4	Tetrachloroethene	2.3	< 2.3	U
108-88-3	Toluene	2.3	< 2.3	U
100-41-4	Ethylbenzene	2.3	< 2.3	U
1330-20-7	Total Xylenes	4.6	< 4.6	U
95-50-1	1,2-Dichlorobenzene	2.3	< 2.3	U
541-73-1	1,3-Dichlorobenzene	2.3	< 2.3	U
106-46-7	1,4-Dichlorobenzene	2.3	< 2.3	U
120-82-1	1,2,4-Trichlorobenzene	12	< 12	U
1634-04-4	Methyl tert-Butyl Ether	2.3	< 2.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	104%
Bromofluorobenzene	78.0%
d4-1,2-Dichlorobenzene	99.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-11,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP11G
LIMS ID: 06-12094
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/08/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 18:05

Sample Amount: 2.12 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 66.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	< 2.4	U
75-35-4	1,1-Dichloroethene	2.4	< 2.4	U
156-60-5	trans-1,2-Dichloroethene	2.4	< 2.4	U
67-66-3	Chloroform	2.4	< 2.4	U
71-55-6	1,1,1-Trichloroethane	2.4	< 2.4	U
79-01-6	Trichloroethene	2.4	< 2.4	U
71-43-2	Benzene	2.4	< 2.4	U
127-18-4	Tetrachloroethene	2.4	< 2.4	U
108-88-3	Toluene	2.4	< 2.4	U
100-41-4	Ethylbenzene	2.4	< 2.4	U
1330-20-7	Total Xylenes	4.7	< 4.7	U
95-50-1	1,2-Dichlorobenzene	2.4	< 2.4	U
541-73-1	1,3-Dichlorobenzene	2.4	< 2.4	U
106-46-7	1,4-Dichlorobenzene	2.4	< 2.4	U
120-82-1	1,2,4-Trichlorobenzene	12	< 12	U
1634-04-4	Methyl tert-Butyl Ether	2.4	< 2.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	105%
Bromofluorobenzene	79.0%
d4-1,2-Dichlorobenzene	98.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-6**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP11H
LIMS ID: 06-12095
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/15/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 16:58

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	112%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	105%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-8,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 20:55

Sample Amount: 1.42 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.1%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.5	< 3.5	U
75-35-4	1,1-Dichloroethene	3.5	< 3.5	U
156-60-5	trans-1,2-Dichloroethene	3.5	< 3.5	U
67-66-3	Chloroform	3.5	< 3.5	U
71-55-6	1,1,1-Trichloroethane	3.5	< 3.5	U
79-01-6	Trichloroethene	3.5	< 3.5	U
71-43-2	Benzene	3.5	< 3.5	U
127-18-4	Tetrachloroethene	3.5	< 3.5	U
108-88-3	Toluene	3.5	< 3.5	U
100-41-4	Ethylbenzene	3.5	< 3.5	U
1330-20-7	Total Xylenes	7.0	< 7.0	U
95-50-1	1,2-Dichlorobenzene	3.5	< 3.5	U
541-73-1	1,3-Dichlorobenzene	3.5	< 3.5	U
106-46-7	1,4-Dichlorobenzene	3.5	< 3.5	U
120-82-1	1,2,4-Trichlorobenzene	18	< 18	U
1634-04-4	Methyl tert-Butyl Ether	3.5	< 3.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.7%
d8-Toluene	107%
Bromofluorobenzene	77.3%
d4-1,2-Dichlorobenzene	97.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-8,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP12C
LIMS ID: 06-12109
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 18:52

Sample Amount: 1.35 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.1%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.7	< 3.7	U
75-35-4	1,1-Dichloroethene	3.7	< 3.7	U
156-60-5	trans-1,2-Dichloroethene	3.7	< 3.7	U
67-66-3	Chloroform	3.7	< 3.7	U
71-55-6	1,1,1-Trichloroethane	3.7	< 3.7	U
79-01-6	Trichloroethene	3.7	< 3.7	U
71-43-2	Benzene	3.7	< 3.7	U
127-18-4	Tetrachloroethene	3.7	< 3.7	U
108-88-3	**Toluene**	**3.7**	**100**	
100-41-4	Ethylbenzene	3.7	< 3.7	U
1330-20-7	Total Xylenes	7.4	< 7.4	U
95-50-1	1,2-Dichlorobenzene	3.7	< 3.7	U
541-73-1	1,3-Dichlorobenzene	3.7	< 3.7	U
106-46-7	1,4-Dichlorobenzene	3.7	< 3.7	U
120-82-1	1,2,4-Trichlorobenzene	18	< 18	U
1634-04-4	Methyl tert-Butyl Ether	3.7	< 3.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	106%
Bromofluorobenzene	83.3%
d4-1,2-Dichlorobenzene	92.4%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-4,S-1**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12D
LIMS ID: 06-12110
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 19:18

Sample Amount: 1.32 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.8	< 3.8	U
75-35-4	1,1-Dichloroethene	3.8	< 3.8	U
156-60-5	trans-1,2-Dichloroethene	3.8	< 3.8	U
67-66-3	Chloroform	3.8	< 3.8	U
71-55-6	1,1,1-Trichloroethane	3.8	< 3.8	U
79-01-6	Trichloroethene	3.8	< 3.8	U
71-43-2	Benzene	3.8	< 3.8	U
127-18-4	Tetrachloroethene	3.8	< 3.8	U
108-88-3	Toluene	3.8	< 3.8	U
100-41-4	Ethylbenzene	3.8	< 3.8	U
1330-20-7	Total Xylenes	7.6	< 7.6	U
95-50-1	1,2-Dichlorobenzene	3.8	< 3.8	U
541-73-1	1,3-Dichlorobenzene	3.8	< 3.8	U
106-46-7	1,4-Dichlorobenzene	3.8	< 3.8	U
120-82-1	1,2,4-Trichlorobenzene	19	< 19	U
1634-04-4	Methyl tert-Butyl Ether	3.8	< 3.8	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	105%
Bromofluorobenzene	76.4%
d4-1,2-Dichlorobenzene	98.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-4,S-1**
Page 1 of 1 **REANALYSIS**

Lab Sample ID: JP12D
LIMS ID: 06-13024
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 18:31

Sample Amount: 1.34 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 79.6%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.7	< 3.7	U
75-35-4	1,1-Dichloroethene	3.7	< 3.7	U
156-60-5	trans-1,2-Dichloroethene	3.7	< 3.7	U
67-66-3	Chloroform	3.7	< 3.7	U
71-55-6	1,1,1-Trichloroethane	3.7	< 3.7	U
79-01-6	Trichloroethene	3.7	< 3.7	U
71-43-2	Benzene	3.7	< 3.7	U
127-18-4	Tetrachloroethene	3.7	< 3.7	U
108-88-3	Toluene	3.7	< 3.7	U
100-41-4	Ethylbenzene	3.7	< 3.7	U
1330-20-7	Total Xylenes	7.5	< 7.5	U
95-50-1	1,2-Dichlorobenzene	3.7	< 3.7	U
541-73-1	1,3-Dichlorobenzene	3.7	< 3.7	U
106-46-7	1,4-Dichlorobenzene	3.7	< 3.7	U
120-82-1	1,2,4-Trichlorobenzene	19	< 19	U
1634-04-4	Methyl tert-Butyl Ether	3.7	< 3.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	106%
Bromofluorobenzene	81.5%
d4-1,2-Dichlorobenzene	101%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-7**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP12E
LIMS ID: 06-12111
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/22/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 17:25

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	112%
Bromofluorobenzene	98.6%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
SAMPLE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 21:29

Sample Amount: 2.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	< 2.4	U
75-35-4	1,1-Dichloroethene	2.4	< 2.4	U
156-60-5	trans-1,2-Dichloroethene	2.4	< 2.4	U
67-66-3	Chloroform	2.4	< 2.4	U
71-55-6	1,1,1-Trichloroethane	2.4	< 2.4	U
79-01-6	Trichloroethene	2.4	< 2.4	U
71-43-2	Benzene	2.4	< 2.4	U
127-18-4	Tetrachloroethene	2.4	< 2.4	U
108-88-3	Toluene	2.4	< 2.4	U
100-41-4	Ethylbenzene	2.4	< 2.4	U
1330-20-7	Total Xylenes	4.7	< 4.7	U
95-50-1	1,2-Dichlorobenzene	2.4	< 2.4	U
541-73-1	1,3-Dichlorobenzene	2.4	< 2.4	U
106-46-7	1,4-Dichlorobenzene	2.4	< 2.4	U
120-82-1	1,2,4-Trichlorobenzene	12	< 12	U
1634-04-4	Methyl tert-Butyl Ether	2.4	< 2.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	99.9%
d8-Toluene	106%
Bromofluorobenzene	74.8%
d4-1,2-Dichlorobenzene	93.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
REANALYSIS

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 19:51

Sample Amount: 2.27 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.2	< 2.2	U
75-35-4	1,1-Dichloroethene	2.2	< 2.2	U
156-60-5	trans-1,2-Dichloroethene	2.2	< 2.2	U
67-66-3	Chloroform	2.2	< 2.2	U
71-55-6	1,1,1-Trichloroethane	2.2	< 2.2	U
79-01-6	Trichloroethene	2.2	< 2.2	U
71-43-2	Benzene	2.2	< 2.2	U
127-18-4	Tetrachloroethene	2.2	< 2.2	U
108-88-3	Toluene	2.2	< 2.2	U
100-41-4	Ethylbenzene	2.2	< 2.2	U
1330-20-7	Total Xylenes	4.4	< 4.4	U
95-50-1	1,2-Dichlorobenzene	2.2	< 2.2	U
541-73-1	1,3-Dichlorobenzene	2.2	< 2.2	U
106-46-7	1,4-Dichlorobenzene	2.2	< 2.2	U
120-82-1	1,2,4-Trichlorobenzene	11	< 11	U
1634-04-4	Methyl tert-Butyl Ether	2.2	< 2.2	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	111%
d8-Toluene	107%
Bromofluorobenzene	82.7%
d4-1,2-Dichlorobenzene	95.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-6,S-1
SAMPLE

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 22:48

Sample Amount: 1.52 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	< 3.3	U
75-35-4	1,1-Dichloroethene	3.3	< 3.3	U
156-60-5	trans-1,2-Dichloroethene	3.3	< 3.3	U
67-66-3	Chloroform	3.3	< 3.3	U
71-55-6	1,1,1-Trichloroethane	3.3	< 3.3	U
79-01-6	Trichloroethene	3.3	< 3.3	U
71-43-2	Benzene	3.3	< 3.3	U
127-18-4	Tetrachloroethene	3.3	< 3.3	U
108-88-3	Toluene	3.3	< 3.3	U
100-41-4	Ethylbenzene	3.3	< 3.3	U
1330-20-7	Total Xylenes	6.6	< 6.6	U
95-50-1	1,2-Dichlorobenzene	3.3	< 3.3	U
541-73-1	1,3-Dichlorobenzene	3.3	< 3.3	U
106-46-7	1,4-Dichlorobenzene	3.3	< 3.3	U
120-82-1	1,2,4-Trichlorobenzene	16	< 16	U
1634-04-4	Methyl tert-Butyl Ether	3.3	< 3.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	109%
Bromofluorobenzene	76.8%
d4-1,2-Dichlorobenzene	97.1%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-6,S-1
REANALYSIS

Lab Sample ID: JP58D
LIMS ID: 06-12380
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 20:17

Sample Amount: 1.45 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.0%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.4	< 3.4	U
75-35-4	1,1-Dichloroethene	3.4	< 3.4	U
156-60-5	trans-1,2-Dichloroethene	3.4	< 3.4	U
67-66-3	Chloroform	3.4	< 3.4	U
71-55-6	1,1,1-Trichloroethane	3.4	< 3.4	U
79-01-6	Trichloroethene	3.4	< 3.4	U
71-43-2	Benzene	3.4	< 3.4	U
127-18-4	Tetrachloroethene	3.4	< 3.4	U
108-88-3	Toluene	3.4	< 3.4	U
100-41-4	Ethylbenzene	3.4	< 3.4	U
1330-20-7	Total Xylenes	6.9	< 6.9	U
95-50-1	1,2-Dichlorobenzene	3.4	< 3.4	U
541-73-1	1,3-Dichlorobenzene	3.4	< 3.4	U
106-46-7	1,4-Dichlorobenzene	3.4	< 3.4	U
120-82-1	1,2,4-Trichlorobenzene	17	< 17	U
1634-04-4	Methyl tert-Butyl Ether	3.4	< 3.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	110%
Bromofluorobenzene	81.1%
d4-1,2-Dichlorobenzene	98.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: TRIP BLANK-10**
Page 1 of 1 **SAMPLE**

Lab Sample ID: JP58E
LIMS ID: 06-12381
Matrix: Water
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 06/26/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 20:11

Sample Amount: 5.00 mL
Purge Volume: 5.0 mL

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	116%
Bromofluorobenzene	98.2%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071706	Method Blank	Low	109%	110%	98.0%	102%	0
LCS-071706	Lab Control	Low	101%	109%	104%	98.0%	0
LCSD-071706	Lab Control Dup	Low	104%	111%	102%	94.2%	0
JP03B	C-9,S-1	Low	104%	106%	80.0%	99.4%	0
JP03BRE	C-9,S-1	Low	104%	106%	80.6%	95.9%	0
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP03C	C-2,S-1	Low	98.6%	104%	80.8%	97.1%	0
JP03CRE	C-2,S-1	Low	108%	104%	73.6%	98.8%	0
JP03CMS	C-2,S-1	Low	96.3%	107%	81.9%	91.0%	0
JP03CMSD	C-2,S-1	Low	96.4%	107%	83.2%	91.7%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP03C RE	C-2,S-1	Low	106%	104%	77.9%	95.4%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12040 to 06-13023

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP03F	TRIP BLANK	5	109%	113%	99.2%	102%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12044 to 06-12044

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP06A	C-10,S-1	Low	103%	109%	77.3%	98.6%	0
JP06ARE	C-10,S-1	Low	108%	107%	81.0%	98.6%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP06B	C-5,S-1	Low	112%	109%	77.9%	101%	0
JP06BRE	C-5,S-1	Low	115%	108%	80.7%	98.1%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12051 to 06-12052

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP06-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP06E	TRIP BLANK	5	109%	116%	97.2%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12055 to 06-12055

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP11E	C-7,S-1	Low	102%	110%	85.1%	93.8%	0
JP11ERE	C-7,S-1	Low	107%	112%	95.7%	101%	0
JP11EMS	C-7,S-1	Low	105%	117%	105%	97.5%	0
JP11EMSD	C-7,S-1	Low	103%	114%	101%	102%	0
MB-071706	Method Blank	Low	109%	110%	98.0%	102%	0
LCS-071706	Lab Control	Low	101%	109%	104%	98.0%	0
LCSD-071706	Lab Control Dup	Low	104%	111%	102%	94.2%	0
JP11F	C-1,S-1	Low	107%	112%	96.2%	105%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP11G	C-11,S-1	Low	108%	104%	78.0%	99.8%	0
JP11GRE	C-11,S-1	Low	111%	105%	79.0%	98.0%	0
JP11E RE	C-7,S-1	Low	114%	114%	93.0%	101%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12092 to 06-13025

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP11H	TRIP BLANK-6	5	107%	112%	101%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12095 to 06-12095

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071706	Method Blank	Low	109%	110%	98.0%	102%	0
LCS-071706	Lab Control	Low	101%	109%	104%	98.0%	0
LCSD-071706	Lab Control Dup	Low	104%	111%	102%	94.2%	0
JP12C	C-8,S-1	Low	96.7%	107%	77.3%	97.8%	0
JP12CRE	C-8,S-1	Low	106%	106%	83.3%	92.4%	0
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP12D	C-4,S-1	Low	111%	105%	76.4%	98.8%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP12D RE	C-4,S-1	Low	113%	106%	81.5%	101%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12109 to 06-13024

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP12-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP12E	TRIP BLANK-7	5	105%	112%	98.6%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	5mL Purge	20mL Purge	5mL Purge	20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12111 to 06-12111

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Sediment

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-071806	Method Blank	Low	106%	112%	97.7%	100%	0
LCS-071806	Lab Control	Low	101%	113%	102%	104%	0
LCSD-071806	Lab Control Dup	Low	102%	115%	105%	107%	0
JP58C	C-12,S-2C/3C	Low	99.9%	106%	74.8%	93.3%	0
JP58CRE	C-12,S-2C/3C	Low	111%	107%	82.7%	95.2%	0
JP58CMS	C-12,S-2C/3C	Low	97.8%	111%	80.6%	90.7%	0
JP58CMSD	C-12,S-2C/3C	Low	101%	112%	86.8%	92.2%	0
MB-071906	Method Blank	Low	110%	112%	99.8%	103%	0
LCS-071906	Lab Control	Low	104%	114%	104%	102%	0
LCSD-071906	Lab Control Dup	Low	106%	115%	105%	99.9%	0
JP58D	C-6,S-1	Low	107%	109%	76.8%	97.1%	0
JP58DRE	C-6,S-1	Low	112%	110%	81.1%	98.0%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260B	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	68-140	71-140	67-161	66-146
(TOL) = d8-Toluene	84-116	84-118	82-118	82-117
(BFB) = Bromofluorobenzene	79-114	79-116	63-122	69-130
(DCB) = d4-1,2-Dichlorobenzene	77-113	78-114	74-112	78-117

Log Number Range: 06-12379 to 06-12380

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
JP58E	TRIP BLANK-10	5	112%	116%	98.2%	104%	0

SW8260B	LCS/MB LIMITS 5mL Purge	LCS/MB LIMITS 20mL Purge	QC LIMITS 5mL Purge	QC LIMITS 20mL Purge
(DCE) = d4-1,2-Dichloroethane	70-134	63-127	66-142	66-139
(TOL) = d8-Toluene	78-123	77-117	75-124	82-123
(BFB) = Bromofluorobenzene	78-121	68-116	75-121	71-113
(DCB) = d4-1,2-Dichlorobenzene	79-116	79-113	78-124	84-125

Prep Method: SW5030B
Log Number Range: 06-12381 to 06-12381

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/17/06 18:44
MSD: 07/17/06 19:10

Sample Amount MS: 1.51 g-dry-wt
MSD: 1.50 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 77.4%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 3.3 U	232	166	140%	235	167	141%	1.3%
1,1-Dichloroethene	< 3.3 U	216	166	130%	219	167	131%	1.4%
trans-1,2-Dichloroethene	< 3.3 U	172	166	104%	173	167	104%	0.6%
Chloroform	< 3.3 U	179	166	108%	180	167	108%	0.6%
1,1,1-Trichloroethane	< 3.3 U	191	166	115%	190	167	114%	0.5%
Trichloroethene	< 3.3 U	175	166	105%	177	167	106%	1.1%
Benzene	< 3.3 U	166	166	100%	172	167	103%	3.6%
Tetrachloroethene	< 3.3 U	190	166	114%	200	167	120%	5.1%
Toluene	< 3.3 U	172	166	104%	171	167	102%	0.6%
Ethylbenzene	43.1	186	166	86.1%	193	167	89.8%	3.7%
Total Xylenes	220	499	497	56.1%	499	500	55.8%	0.0%
1,2-Dichlorobenzene	< 3.3 U	133	166	80.1%	127	167	76.0%	4.6%
1,3-Dichlorobenzene	< 3.3 U	141	166	84.9%	136	167	81.4%	3.6%
1,4-Dichlorobenzene	< 3.3 U	140	166	84.3%	140	167	83.8%	0.0%
1,2,4-Trichlorobenzene	< 16.6 U	48.8	166	29.4%	48.7	167	29.2%	0.2%
Methyl tert-Butyl Ether	< 3.3 U	138	166	83.1%	142	167	85.0%	2.9%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 18:44

Sample Amount: 1.51 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	---	
75-35-4	1,1-Dichloroethene	3.3	---	
156-60-5	trans-1,2-Dichloroethene	3.3	---	
67-66-3	Chloroform	3.3	---	
71-55-6	1,1,1-Trichloroethane	3.3	---	
79-01-6	Trichloroethene	3.3	---	
71-43-2	Benzene	3.3	---	
127-18-4	Tetrachloroethene	3.3	---	
108-88-3	Toluene	3.3	---	
100-41-4	Ethylbenzene	3.3	---	
1330-20-7	Total Xylenes	6.6	---	
95-50-1	1,2-Dichlorobenzene	3.3	---	
541-73-1	1,3-Dichlorobenzene	3.3	---	
106-46-7	1,4-Dichlorobenzene	3.3	---	
120-82-1	1,2,4-Trichlorobenzene	17	---	
1634-04-4	Methyl tert-Butyl Ether	3.3	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.3%
d8-Toluene	107%
Bromofluorobenzene	81.9%
d4-1,2-Dichlorobenzene	91.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-2,S-1**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: JP03C
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/07/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 19:10

Sample Amount: 1.50 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 77.4%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	3.3	---	
75-35-4	1,1-Dichloroethene	3.3	---	
156-60-5	trans-1,2-Dichloroethene	3.3	---	
67-66-3	Chloroform	3.3	---	
71-55-6	1,1,1-Trichloroethane	3.3	---	
79-01-6	Trichloroethene	3.3	---	
71-43-2	Benzene	3.3	---	
127-18-4	Tetrachloroethene	3.3	---	
108-88-3	Toluene	3.3	---	
100-41-4	Ethylbenzene	3.3	---	
1330-20-7	Total Xylenes	6.6	---	
95-50-1	1,2-Dichlorobenzene	3.3	---	
541-73-1	1,3-Dichlorobenzene	3.3	---	
106-46-7	1,4-Dichlorobenzene	3.3	---	
120-82-1	1,2,4-Trichlorobenzene	17	---	
1634-04-4	Methyl tert-Butyl Ether	3.3	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.4%
d8-Toluene	107%
Bromofluorobenzene	83.2%
d4-1,2-Dichlorobenzene	91.7%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/18/06 17:33
MSD: 07/18/06 17:59

Sample Amount MS: 0.633 g-dry-wt
MSD: 0.674 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 40.9%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 1.3 U	352	395	89.1%	320	371	86.3%	9.5%
1,1-Dichloroethene	< 1.3 U	391	395	99.0%	379	371	102%	3.1%
trans-1,2-Dichloroethene	< 1.3 U	390	395	98.7%	375	371	101%	3.9%
Chloroform	< 1.3 U	403	395	102%	389	371	105%	3.5%
1,1,1-Trichloroethane	< 1.3 U	388	395	98.2%	387	371	104%	0.3%
Trichloroethene	< 1.3 U	418	395	106%	399	371	108%	4.7%
Benzene	< 1.3 U	388	395	98.2%	382	371	103%	1.6%
Tetrachloroethene	< 1.3 U	427	395	108%	423	371	114%	0.9%
Toluene	440 E	1150	395	180%	536	371	25.9%	72.8%
Ethylbenzene	< 1.3 U	450	395	114%	436	371	118%	3.2%
Total Xylenes	< 2.6 U	1280	1180	108%	1280	1110	115%	0.0%
1,2-Dichlorobenzene	< 1.3 U	369	395	93.4%	391	371	105%	5.8%
1,3-Dichlorobenzene	< 1.3 U	383	395	97.0%	395	371	106%	3.1%
1,4-Dichlorobenzene	< 1.3 U	388	395	98.2%	398	371	107%	2.5%
1,2,4-Trichlorobenzene	< 6.5 U	262	395	66.3%	332	371	89.5%	23.6%
Methyl tert-Butyl Ether	< 1.3 U	342	395	86.6%	348	371	93.8%	1.7%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **MATRIX SPIKE**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 17:33

Sample Amount: 0.633 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	7.9	---	
75-35-4	1,1-Dichloroethene	7.9	---	
156-60-5	trans-1,2-Dichloroethene	7.9	---	
67-66-3	Chloroform	7.9	---	
71-55-6	1,1,1-Trichloroethane	7.9	---	
79-01-6	Trichloroethene	7.9	---	
71-43-2	Benzene	7.9	---	
127-18-4	Tetrachloroethene	7.9	---	
108-88-3	Toluene	7.9	---	
100-41-4	Ethylbenzene	7.9	---	
1330-20-7	Total Xylenes	16	---	
95-50-1	1,2-Dichlorobenzene	7.9	---	
541-73-1	1,3-Dichlorobenzene	7.9	---	
106-46-7	1,4-Dichlorobenzene	7.9	---	
120-82-1	1,2,4-Trichlorobenzene	40	---	
1634-04-4	Methyl tert-Butyl Ether	7.9	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	117%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	97.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: C-7,S-1**
Page 1 of 1 **MATRIX SPIKE DUP**

Lab Sample ID: JP11E
LIMS ID: 06-12092
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP11-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/06/06
Date Received: 07/11/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 17:59

Sample Amount: 0.674 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 40.9%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	7.4	---	
75-35-4	1,1-Dichloroethene	7.4	---	
156-60-5	trans-1,2-Dichloroethene	7.4	---	
67-66-3	Chloroform	7.4	---	
71-55-6	1,1,1-Trichloroethane	7.4	---	
79-01-6	Trichloroethene	7.4	---	
71-43-2	Benzene	7.4	---	
127-18-4	Tetrachloroethene	7.4	---	
108-88-3	Toluene	7.4	---	
100-41-4	Ethylbenzene	7.4	---	
1330-20-7	Total Xylenes	15	---	
95-50-1	1,2-Dichlorobenzene	7.4	---	
541-73-1	1,3-Dichlorobenzene	7.4	---	
106-46-7	1,4-Dichlorobenzene	7.4	---	
120-82-1	1,2,4-Trichlorobenzene	37	---	
1634-04-4	Methyl tert-Butyl Ether	7.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	114%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
MATRIX SPIKE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst MS: FINN5/JLM
MSD: FINN5/JLM
Date Analyzed MS: 07/18/06 21:56
MSD: 07/18/06 22:22

Sample Amount MS: 2.11 g-dry-wt
MSD: 2.13 g-dry-wt
Purge Volume MS: 5.0 mL
MSD: 5.0 mL
Moisture: 64.3%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Vinyl Chloride	< 2.4 U	153	118	130%	120	117	103%	24.2%
1,1-Dichloroethene	< 2.4 U	143	118	121%	117	117	100%	20.0%
trans-1,2-Dichloroethene	< 2.4 U	99.5	118	84.3%	83.0	117	70.9%	18.1%
Chloroform	< 2.4 U	125	118	106%	102	117	87.2%	20.3%
1,1,1-Trichloroethane	< 2.4 U	132	118	112%	107	117	91.5%	20.9%
Trichloroethene	< 2.4 U	115	118	97.5%	95.7	117	81.8%	18.3%
Benzene	< 2.4 U	118	118	100%	95.8	117	81.9%	20.8%
Tetrachloroethene	< 2.4 U	125	118	106%	105	117	89.7%	17.4%
Toluene	< 2.4 U	119	118	101%	101	117	86.3%	16.4%
Ethylbenzene	< 2.4 U	122	118	103%	99.1	117	84.7%	20.7%
Total Xylenes	< 4.7 U	314	355	88.5%	314	352	89.2%	0.0%
1,2-Dichlorobenzene	< 2.4 U	75.7	118	64.2%	56.4	117	48.2%	29.2%
1,3-Dichlorobenzene	< 2.4 U	78.8	118	66.8%	60.8	117	52.0%	25.8%
1,4-Dichlorobenzene	< 2.4 U	79.6	118	67.5%	59.7	117	51.0%	28.6%
1,2,4-Trichlorobenzene	< 11.7 U	27.5	118	23.3%	21.9	117	18.7%	22.7%
Methyl tert-Butyl Ether	< 2.4 U	94.2	118	79.8%	76.3	117	65.2%	21.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
MATRIX SPIKE

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 21:56

Sample Amount: 2.11 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	---	
75-35-4	1,1-Dichloroethene	2.4	---	
156-60-5	trans-1,2-Dichloroethene	2.4	---	
67-66-3	Chloroform	2.4	---	
71-55-6	1,1,1-Trichloroethane	2.4	---	
79-01-6	Trichloroethene	2.4	---	
71-43-2	Benzene	2.4	---	
127-18-4	Tetrachloroethene	2.4	---	
108-88-3	Toluene	2.4	---	
100-41-4	Ethylbenzene	2.4	---	
1330-20-7	Total Xylenes	4.7	---	
95-50-1	1,2-Dichlorobenzene	2.4	---	
541-73-1	1,3-Dichlorobenzene	2.4	---	
106-46-7	1,4-Dichlorobenzene	2.4	---	
120-82-1	1,2,4-Trichlorobenzene	12	---	
1634-04-4	Methyl tert-Butyl Ether	2.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.8%
d8-Toluene	111%
Bromofluorobenzene	80.6%
d4-1,2-Dichlorobenzene	90.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: C-12,S-2C/3C
MATRIX SPIKE DUP

Lab Sample ID: JP58C
LIMS ID: 06-12379
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP58-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: 07/11/06
Date Received: 07/13/06

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 22:22

Sample Amount: 2.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 64.3%

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	2.4	---	
75-35-4	1,1-Dichloroethene	2.4	---	
156-60-5	trans-1,2-Dichloroethene	2.4	---	
67-66-3	Chloroform	2.4	---	
71-55-6	1,1,1-Trichloroethane	2.4	---	
79-01-6	Trichloroethene	2.4	---	
71-43-2	Benzene	2.4	---	
127-18-4	Tetrachloroethene	2.4	---	
108-88-3	Toluene	2.4	---	
100-41-4	Ethylbenzene	2.4	---	
1330-20-7	Total Xylenes	4.7	---	
95-50-1	1,2-Dichlorobenzene	2.4	---	
541-73-1	1,3-Dichlorobenzene	2.4	---	
106-46-7	1,4-Dichlorobenzene	2.4	---	
120-82-1	1,2,4-Trichlorobenzene	12	---	
1634-04-4	Methyl tert-Butyl Ether	2.4	---	

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	112%
Bromofluorobenzene	86.8%
d4-1,2-Dichlorobenzene	92.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-071706**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-071706
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/17/06 12:38
LCSD: 07/17/06 13:15

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	45.0	50.0	90.0%	44.1	50.0	88.2%	2.0%
1,1-Dichloroethene	52.2	50.0	104%	53.7	50.0	107%	2.8%
trans-1,2-Dichloroethene	52.5	50.0	105%	53.2	50.0	106%	1.3%
Chloroform	53.1	50.0	106%	54.5	50.0	109%	2.6%
1,1,1-Trichloroethane	57.5	50.0	115%	58.6	50.0	117%	1.9%
Trichloroethene	55.9	50.0	112%	56.3	50.0	113%	0.7%
Benzene	49.7	50.0	99.4%	50.3	50.0	101%	1.2%
Tetrachloroethene	56.8	50.0	114%	55.1	50.0	110%	3.0%
Toluene	54.9	50.0	110%	56.3	50.0	113%	2.5%
Ethylbenzene	59.5	50.0	119%	58.3	50.0	117%	2.0%
Total Xylenes	170	150	113%	168	150	112%	1.2%
1,2-Dichlorobenzene	55.6	50.0	111%	52.4	50.0	105%	5.9%
1,3-Dichlorobenzene	57.7	50.0	115%	54.0	50.0	108%	6.6%
1,4-Dichlorobenzene	58.2	50.0	116%	54.7	50.0	109%	6.2%
1,2,4-Trichlorobenzene	63.0	50.0	126%	57.4	50.0	115%	9.3%
Methyl tert-Butyl Ether	51.6	50.0	103%	55.8	50.0	112%	7.8%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	104%
d8-Toluene	109%	111%
Bromofluorobenzene	104%	102%
d4-1,2-Dichlorobenzene	98.0%	94.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: LCS-071806**
Page 1 of 1 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-071806
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/18/06 13:07
LCSD: 07/18/06 14:37

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	45.8	50.0	91.6%	40.9	50.0	81.8%	11.3%
1,1-Dichloroethene	49.2	50.0	98.4%	47.3	50.0	94.6%	3.9%
trans-1,2-Dichloroethene	51.1	50.0	102%	48.1	50.0	96.2%	6.0%
Chloroform	50.4	50.0	101%	49.8	50.0	99.6%	1.2%
1,1,1-Trichloroethane	51.7	50.0	103%	51.7	50.0	103%	0.0%
Trichloroethene	53.5	50.0	107%	54.2	50.0	108%	1.3%
Benzene	50.9	50.0	102%	48.9	50.0	97.8%	4.0%
Tetrachloroethene	55.4	50.0	111%	55.6	50.0	111%	0.4%
Toluene	55.9	50.0	112%	55.7	50.0	111%	0.4%
Ethylbenzene	57.1	50.0	114%	58.9	50.0	118%	3.1%
Total Xylenes	166	150	111%	167	150	111%	0.6%
1,2-Dichlorobenzene	55.9	50.0	112%	54.7	50.0	109%	2.2%
1,3-Dichlorobenzene	56.8	50.0	114%	56.6	50.0	113%	0.4%
1,4-Dichlorobenzene	57.4	50.0	115%	57.5	50.0	115%	0.2%
1,2,4-Trichlorobenzene	58.8	50.0	118%	58.6	50.0	117%	0.3%
Methyl tert-Butyl Ether	45.8	50.0	91.6%	44.5	50.0	89.0%	2.9%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	102%
d8-Toluene	113%	115%
Bromofluorobenzene	102%	105%
d4-1,2-Dichlorobenzene	104%	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS

Sample ID: LCS-071906
LAB CONTROL SAMPLE

Lab Sample ID: LCS-071906
LIMS ID: 06-13023
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: FINN5/JLM
LCSD: FINN5/JLM
Date Analyzed LCS: 07/19/06 10:34
LCSD: 07/19/06 11:12

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Vinyl Chloride	50.7	50.0	101%	48.0	50.0	96.0%	5.5%
1,1-Dichloroethene	52.1	50.0	104%	50.1	50.0	100%	3.9%
trans-1,2-Dichloroethene	52.4	50.0	105%	51.6	50.0	103%	1.5%
Chloroform	53.1	50.0	106%	52.4	50.0	105%	1.3%
1,1,1-Trichloroethane	53.4	50.0	107%	51.9	50.0	104%	2.8%
Trichloroethene	56.3	50.0	113%	53.6	50.0	107%	4.9%
Benzene	52.8	50.0	106%	49.6	50.0	99.2%	6.2%
Tetrachloroethene	59.5	50.0	119%	54.6	50.0	109%	8.6%
Toluene	60.4	50.0	121%	56.5	50.0	113%	6.7%
Ethylbenzene	62.2	50.0	124%	58.7	50.0	117%	5.8%
Total Xylenes	178	150	119%	168	150	112%	5.8%
1,2-Dichlorobenzene	60.4	50.0	121%	55.8	50.0	112%	7.9%
1,3-Dichlorobenzene	61.6	50.0	123%	56.4	50.0	113%	8.8%
1,4-Dichlorobenzene	62.4	50.0	125%	56.6	50.0	113%	9.7%
1,2,4-Trichlorobenzene	64.3	50.0	129%	58.2	50.0	116%	10.0%
Methyl tert-Butyl Ether	48.1	50.0	96.2%	49.5	50.0	99.0%	2.9%

Reported in μg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	106%
d8-Toluene	114%	115%
Bromofluorobenzene	104%	105%
d4-1,2-Dichlorobenzene	102%	99.9%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0717

Lab Name: ANALYTICAL RESOURCES, INC Contract: G&G

Lab Code: JP90 Case No.: KLAMATH RIVER SEDIME SDG No.: 17JUL06

Lab File ID: MB0717 Lab Sample ID: MB0717

Date Analyzed: 07/17/06 Time Analyzed: 1341

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0717	LCS0717	LCS0717	1238
02	LCS0717	LCS0717	LCS0717A	1315
03	TRIP BLANK	JP03F	JP03F	1632
04	TRIP BLANK-6	JP11H	JP11H	1658
05	TRIP BLANK-7	JP12E	JP12E	1725
06	C-9,S-1	JP03B	JP03B	1751
07	C-2,S-1	JP03C	JP03C	1817
08	C-2,S-1 MS	JP03C MS	JP03CMS	1844
09	C-2,S-1 MSD	JP03C MSD	JP03CMD	1910
10	C-7,S-1	JP11E	JP11E	1936
11	C-1,S-1	JP11F	JP11F	2003
12	C-8,S-1	JP12C	JP12C	2055
13	C-4,S-1	JP12D	JP12D	2122
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-071706**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-071706
LIMS ID: 06-12040
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/17/06 13:41

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	110%
Bromofluorobenzene	98.0%
d4-1,2-Dichlorobenzene	102%

FORM I

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0718

Lab Name: ANALYTICAL RESOURCES, INC Contract: G&G

Lab Code: JP03 Case No.: KLAMATH RIVER SEDIME SDG No.: JP58

Lab File ID: MB0718 Lab Sample ID: MB0718

Date Analyzed: 07/18/06 Time Analyzed: 1411

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0718	LCS0718	LCS0718	1307
02	LCS0718	LCS0718	LCS0718B	1437
03	C-9,S-1	JP03B	JP03B2	1614
04	C-2,S-1	JP03C	JP03C2	1640
05	C-7,S-1	JP11E	JP11E2	1706
06	C-7,S-1 MS	JP11EMS	JP11EMS	1733
07	C-7,S-1 MSD	JP11EMSD	JP11EMD	1759
08	C-11,S-1	JP11G	JP11G2	1825
09	C-8,S-1	JP12C	JP12C2	1852
10	C-4,S-1	JP12D	JP12D2	1918
11	TRIP BLANK	JP06E	JP06E	1944
12	TRIP BLANK-1	JP58E	JP58E	2011
13	C-10,S-1	JP06A	JP06A	2037
14	C-5,S-1	JP06B	JP06B	2103
15	C-12,S-2C/3C	JP58C	JP58C	2129
16	C-12,S-2C/3C	JP58CMS	JP58CMS	2156
17	C-12,S-2C/3C	JP58CMSD	JP58CMD	2222
18	C-6,S-1	JP58D	JP58D	2248
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260B **Sample ID: MB-071806**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-071806
LIMS ID: 06-12041
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/18/06 14:11

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	112%
Bromofluorobenzene	97.7%
d4-1,2-Dichlorobenzene	100%

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB0719

Lab Name: ANALYTICAL RESOURCES, INC Contract: G&G

Lab Code: JP90 Case No.: KLAMATH RIVER SEDIME SDG No.: JP58

Lab File ID: MB0719 Lab Sample ID: MB0719

Date Analyzed: 07/19/06 Time Analyzed: 1138

GC Column: RTX502.2 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Instrument ID: FINN5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS0719	LCS0719	LCS0719	1034
02	LCS0719	LCS0719	LCS0719A	1112
03	C-2,S-1	JP03C	JP03C3	1712
04	C-7,S-1	JP11E	JP11E3	1739
05	C-11,S-1	JP11G	JP11G3	1805
06	C-4,S-1	JP12D	JP12D3	1831
07	C-10,S-1	JP06A	JP06A2	1858
08	C-5,S-1	JP06B	JP06B2	1924
09	C-12,S-2C/3C	JP58C	JP58C2	1951
10	C-6,S-1	JP58D	JP58D2	2017
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COMMENTS:

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS
Page 1 of 1

Sample ID: MB-071906
METHOD BLANK

Lab Sample ID: MB-071906
LIMS ID: 06-13023
Matrix: Sediment
Data Release Authorized:
Reported: 07/25/06

QC Report No: JP03-GEC
Project: Klamath River Sediment Study
21-1-12195-002
Date Sampled: NA
Date Received: NA

Instrument/Analyst: FINN5/JLM
Date Analyzed: 07/19/06 11:38

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
1330-20-7	Total Xylenes	2.0	< 2.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.0	< 1.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	112%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	103%

FORM I

Grain Size

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: G&G Associates	Project No.: JN72
Client Project: Klamath River Sediment Study	

Case Narrative

1. Three samples were received on June 27, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Smith Date: 7-11-06
Title: Lead Technician

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

ANALYTICAL RESOURCES INCORPORATED

G&G Associates
Klamath River Sediment Study

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
SL4-SC20A	100.0	100.0	100.0	99.9	99.8	99.2	98.5	98.1	95.5	84.0	54.4	30.0	19.5	9.7
SL4-SC20A	100.0	100.0	100.0	99.8	99.7	99.3	98.8	98.4	97.2	86.0	54.3	30.5	19.1	9.8
SL4-SC20A	100.0	100.0	100.0	99.9	99.7	99.2	98.6	98.2	97.1	84.9	53.5	29.7	19.2	9.7
IG5-S1	100.0	45.9	35.5	30.6	26.6	22.0	17.1	13.9	10.4	7.8	5.5	3.7	2.8	1.8
IG6-S1	100.0	98.6	97.6	96.5	92.8	89.6	86.9	82.6	78.6	63.6	53.4	43.9	35.0	23.6
IG6-S2	100.0	52.3	45.1	40.0	34.2	28.1	22.8	18.6	17.3	13.3	9.8	6.9	5.2	3.2

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JN72

G&G Associates
Klamath River Sediment Study

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
SL4-SC20A	0.0	0.1	0.2	0.6	0.7	0.4	2.6	11.5	29.6	24.3	10.5	9.8	9.7
SL4-SC20A	0.0	0.2	0.1	0.4	0.5	0.3	1.2	11.2	31.7	23.8	11.4	9.3	9.8
SL4-SC20A	0.0	0.1	0.2	0.5	0.6	0.4	1.1	12.2	31.4	23.7	10.6	9.5	9.7
IG5-S1	64.5	4.8	4.1	4.6	4.9	3.2	3.6	2.5	2.3	1.8	0.9	1.0	1.8
IG6-S1	2.4	1.2	3.7	3.2	2.7	4.3	4.0	15.0	10.1	9.5	8.9	11.4	23.6
IG6-S2	54.9	5.1	5.9	6.1	5.2	4.3	1.2	4.0	3.5	2.9	1.7	2.0	3.2

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JN72

G&G Associates
Klamath River Sediment Study

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
SL4-SC20A	69.7
SL4-SC20A	69.0
SL4-SC20A	69.1
IG5-S1	88.0
IG6-S1	32.2
IG6-S2	78.6

Triplicate Average	69.3
Standard Deviation	0.41
%RSD	0.59

(Total Solids at 90 C)

JN72

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	G&G Associates	Project No.:	Klamath River Sediment Study
ARI Triplicate Sample ID:	JN05 F	Batch No.:	JN72 -1
Client Triplicate Sample ID:	SL4-SC20A	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
SL4-SC20A	100.0	100.0	100.0	99.9	99.8	99.2	98.5	98.1	95.5	84.0	54.4	30.0	19.5	9.7
SL4-SC20A	100.0	100.0	100.0	99.8	99.7	99.3	98.8	98.4	97.2	86.0	54.3	30.5	19.1	9.8
SL4-SC20A	100.0	100.0	100.0	99.9	99.7	99.2	98.6	98.2	97.1	84.9	53.5	29.7	19.2	9.7
AVE	NA	100.00	100.00	99.90	99.73	99.23	98.64	98.24	96.59	84.96	54.04	30.09	19.26	9.71
STDEV	NA	0.00	0.00	0.06	0.04	0.05	0.13	0.18	0.95	1.00	0.51	0.41	0.23	0.06
%RSD	NA	0.00	0.00	0.06	0.04	0.05	0.13	0.19	0.98	1.17	0.94	1.35	1.19	0.58

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
SL4-SC20A	6/21/2006	6/30/2006	7/7/2006	100.2		20.5
SL4-SC20A	6/21/2006	6/30/2006	7/7/2006	99.2		21.3
SL4-SC20A	6/21/2006	6/30/2006	7/7/2006	100.0		21.5
IG5-S1	6/25/2006	6/30/2006	7/7/2006	100.8		18.7
IG6-S1	6/23/2006	6/30/2006	7/7/2006	96.3		9.7
IG6-S2	6/23/2006	6/30/2006	7/7/2006	97.5		13.8

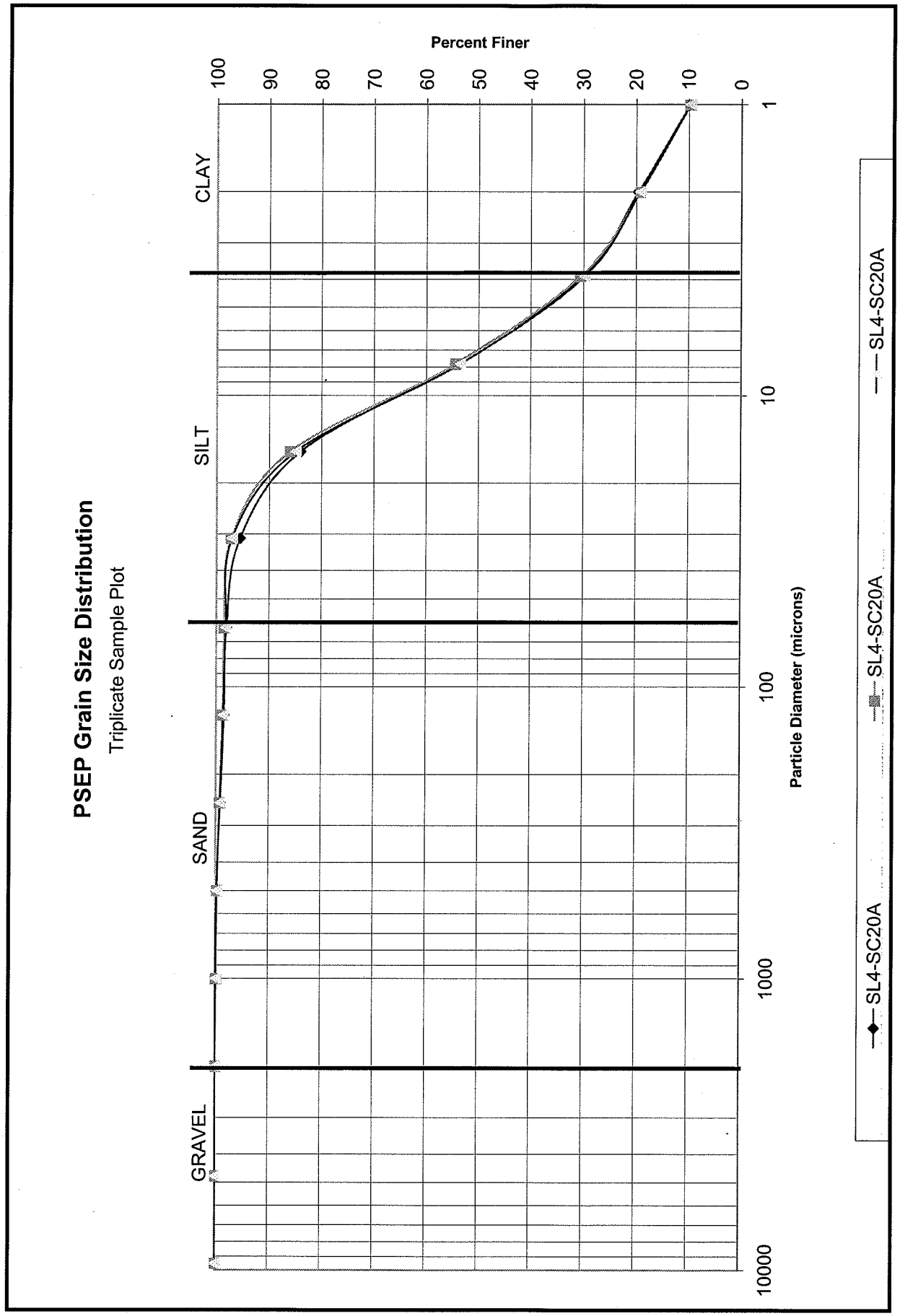
* ARI Internal QA limits = 95-105%

Notes to the Testing:

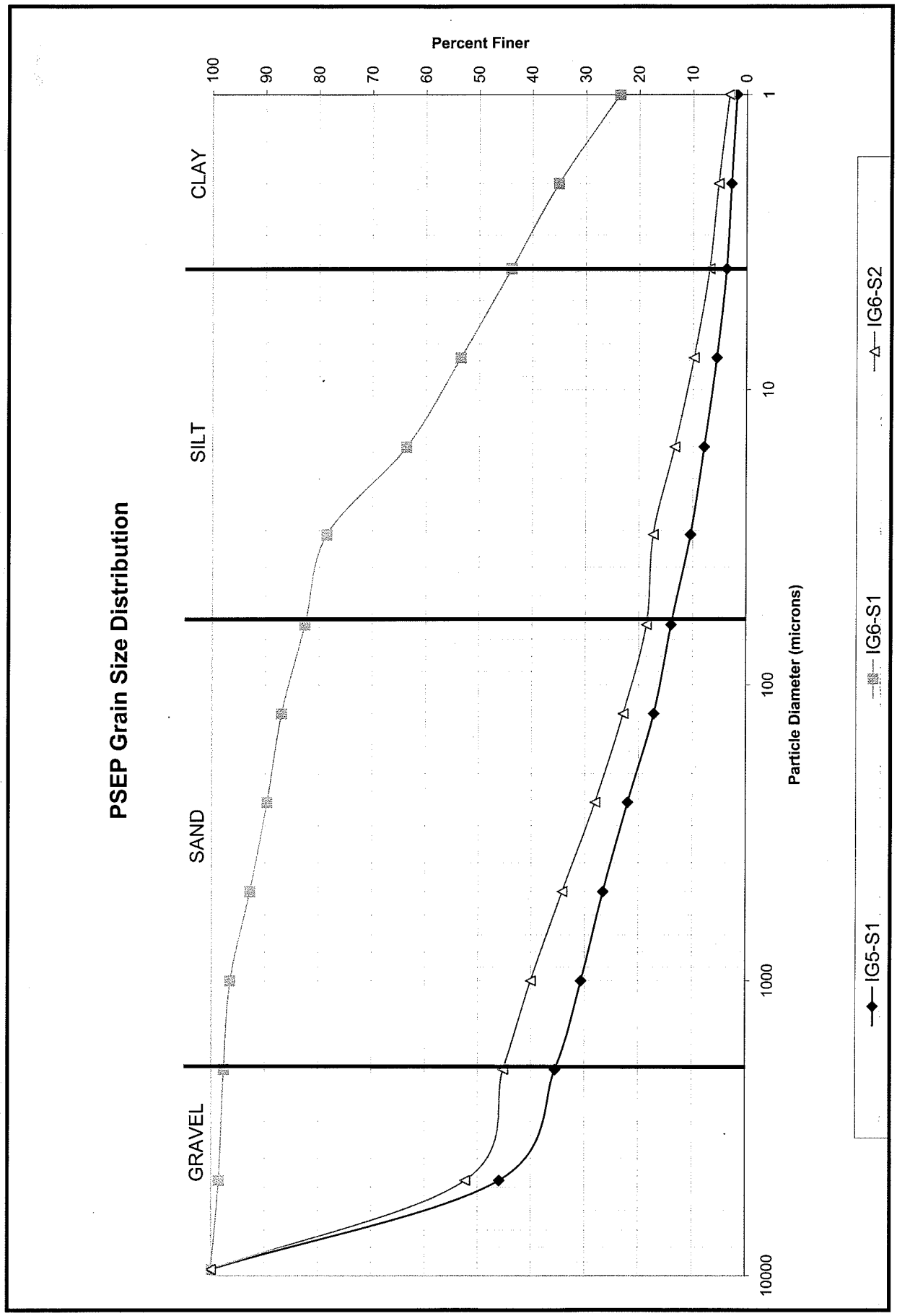
1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JN72

ANALYTICAL RESOURCES INCORPORATED



ANALYTICAL RESOURCES INCORPORATED



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP11
Client Project: Klamath River Sediment Study	

Case Narrative

1. Seven samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from this job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Smith Date: July 31, 2006
Title: Lead Technician

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GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C-7,S-1	100.0	99.2	94.2	80.1	62.9	42.9	18.8	10.2	7.5	5.8	4.6	3.6	2.6	1.8
C-7,S-1	100.0	98.8	93.0	78.9	61.3	41.6	18.1	9.9	7.7	6:1	4.8	3.7	2.8	1.9
C-7,S-1	100.0	99.6	94.2	80.0	62.4	42.3	18.3	9.7	7.3	5.6	4.5	3.5	2.6	1.8
C-7,S-4	100.0	100.0	100.0	99.9	98.5	96.0	87.3	69.7	54.4	37.6	27.2	19.9	14.3	9.7
C-1,S-2	100.0	41.9	28.2	19.9	14.3	10.0	6.2	4.2	3.3	2.3	1.5	1.0	0.6	0.4
C-11,S-3	100.0	98.5	92.7	87.2	79.2	68.9	57.9	47.9	39.9	31.4	24.7	18.7	14.8	11.3
C-11,S-4	100.0	98.1	95.8	91.5	83.8	73.8	62.3	52.0	43.2	34.0	26.9	20.7	16.0	12.3
C-1,S-1	100.0	73.9	32.1	16.7	13.7	10.1	6.5	5.0	1.8	1.3	0.9	0.6	0.4	0.3
C-11,S-1	100.0	100.0	99.6	98.8	98.3	97.9	96.8	91.7	84.9	68.2	52.8	41.4	31.2	22.6

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP11

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C-7,S-1	5.8	14.1	17.1	20.1	24.0	8.7	2.7	1.7	1.2	1.0	1.0	0.8	1.8
C-7,S-1	7.0	14.1	17.6	19.7	23.5	8.3	2.1	1.6	1.3	1.2	0.9	0.9	1.9
C-7,S-1	5.8	14.2	17.5	20.2	23.9	8.6	2.4	1.7	1.1	1.0	0.9	0.8	1.8
C-7,S-4	0.0	0.1	1.4	2.4	8.7	17.6	15.3	16.8	10.4	7.3	5.6	4.6	9.7
C-1,S-2	71.8	8.3	5.6	4.2	3.8	2.0	0.9	1.0	0.8	0.5	0.4	0.3	0.4
C-11,S-3	7.3	5.6	7.9	10.3	11.0	10.0	8.0	8.4	6.7	6.0	4.0	3.5	11.3
C-11,S-4	4.2	4.3	7.7	10.0	11.4	10.3	8.8	9.2	7.2	6.2	4.7	3.7	12.3
C-1,S-1	67.9	15.4	3.0	3.6	3.6	1.5	3.2	0.5	0.4	0.3	0.2	0.1	0.3
C-11,S-1	0.4	0.9	0.5	0.4	1.1	5.1	6.8	16.7	15.4	11.4	10.1	8.6	22.6

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP11

GEC
Klamath River Sediment Study 21-1-12195-002

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C-7,S-1	70.1
C-7,S-1	70.4
C-7,S-1	70.0
C-7,S-4	47.8
C-1,S-2	90.5
C-11,S-3	68.9
C-11,S-4	71.5
C-1,S-1	88.6
C-11,S-1	37.3

Triplicate Average	70.2
Standard Deviation	0.21
%RSD	0.30

(Total Solids at 90 C)

JP11

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-002
ARI Triplicate Sample ID:	JP11 E	Batch No.:	JP11 -1
Client Triplicate Sample ID:	C-7,S-1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C-7,S-1	100.0	99.2	94.2	80.1	62.9	42.9	18.8	10.2	7.5	5.8	4.6	3.6	2.6	1.8
C-7,S-1	100.0	98.8	93.0	78.9	61.3	41.6	18.1	9.9	7.7	6.1	4.8	3.7	2.8	1.9
C-7,S-1	100.0	99.6	94.2	80.0	62.4	42.3	18.3	9.7	7.3	5.6	4.5	3.5	2.6	1.8
AVE	NA	99.19	93.78	79.64	62.23	42.24	18.43	9.92	7.52	5.83	4.65	3.60	2.65	1.83
STDEV	NA	0.37	0.69	0.63	0.83	0.65	0.37	0.23	0.20	0.27	0.17	0.10	0.13	0.07
%RSD	NA	0.37	0.74	0.80	1.34	1.54	2.00	2.30	2.67	4.62	3.67	2.73	4.84	3.65

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C-7,S-1	7/6/2006	7/22/2006	7/29/2006	100.3		5.5
C-7,S-1	7/6/2006	7/22/2006	7/29/2006	100.0		6.3
C-7,S-1	7/6/2006	7/22/2006	7/29/2006	100.1		5.1
C-7,S-4	7/6/2006	7/22/2006	7/29/2006	101.5		13.6
C-1,S-2	7/6/2006	7/22/2006	7/29/2006	99.6		5.7
C-11,S-3	7/6/2006	7/22/2006	7/29/2006	100.4		12.8
C-11,S-4	7/6/2006	7/22/2006	7/29/2006	100.1		13.7
C-1,S-1	7/6/2006	7/22/2006	7/29/2006	102.6		6.8
C-11,S-1	7/6/2006	7/22/2006	7/29/2006	98.2		13.8

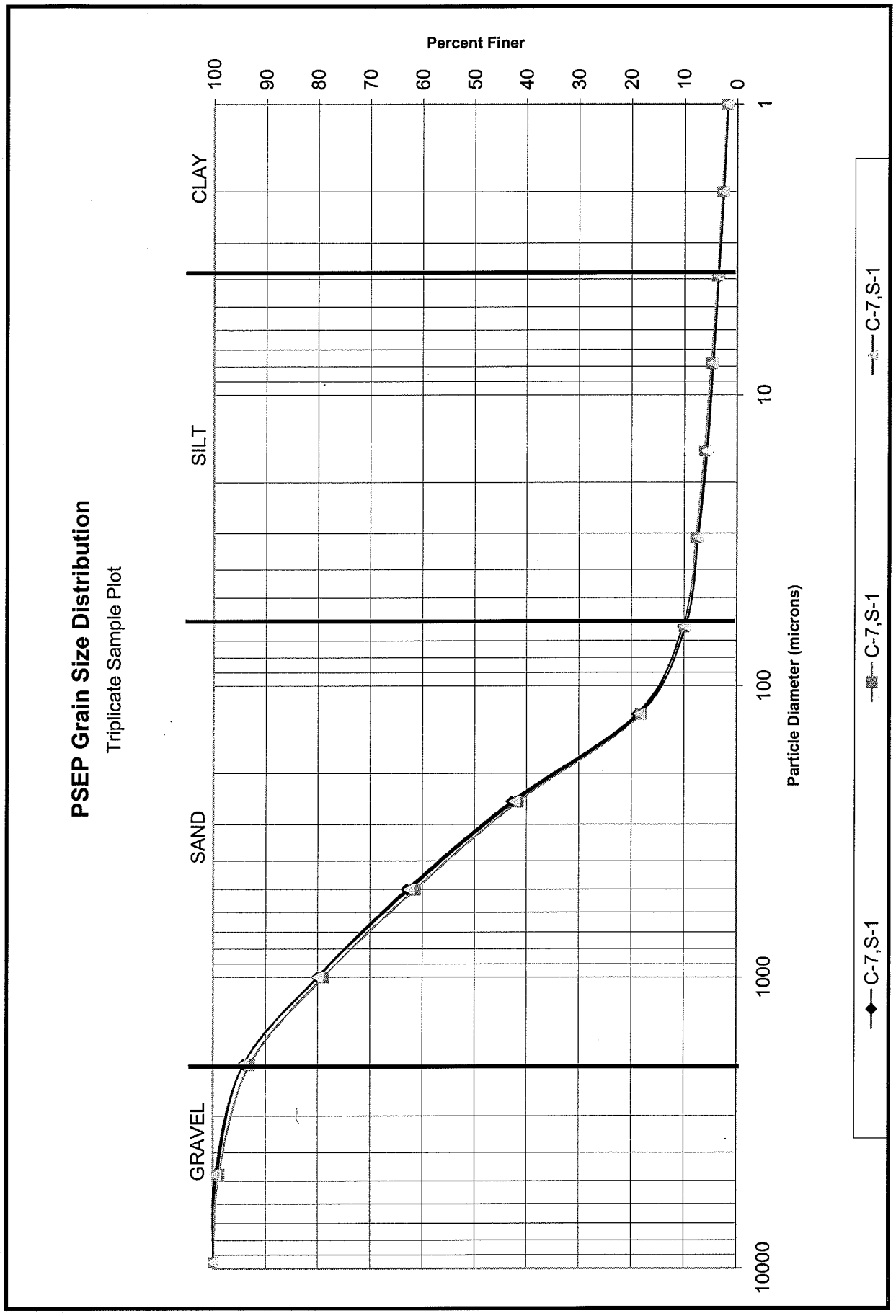
* ARI Internal QA limits = 95-105%

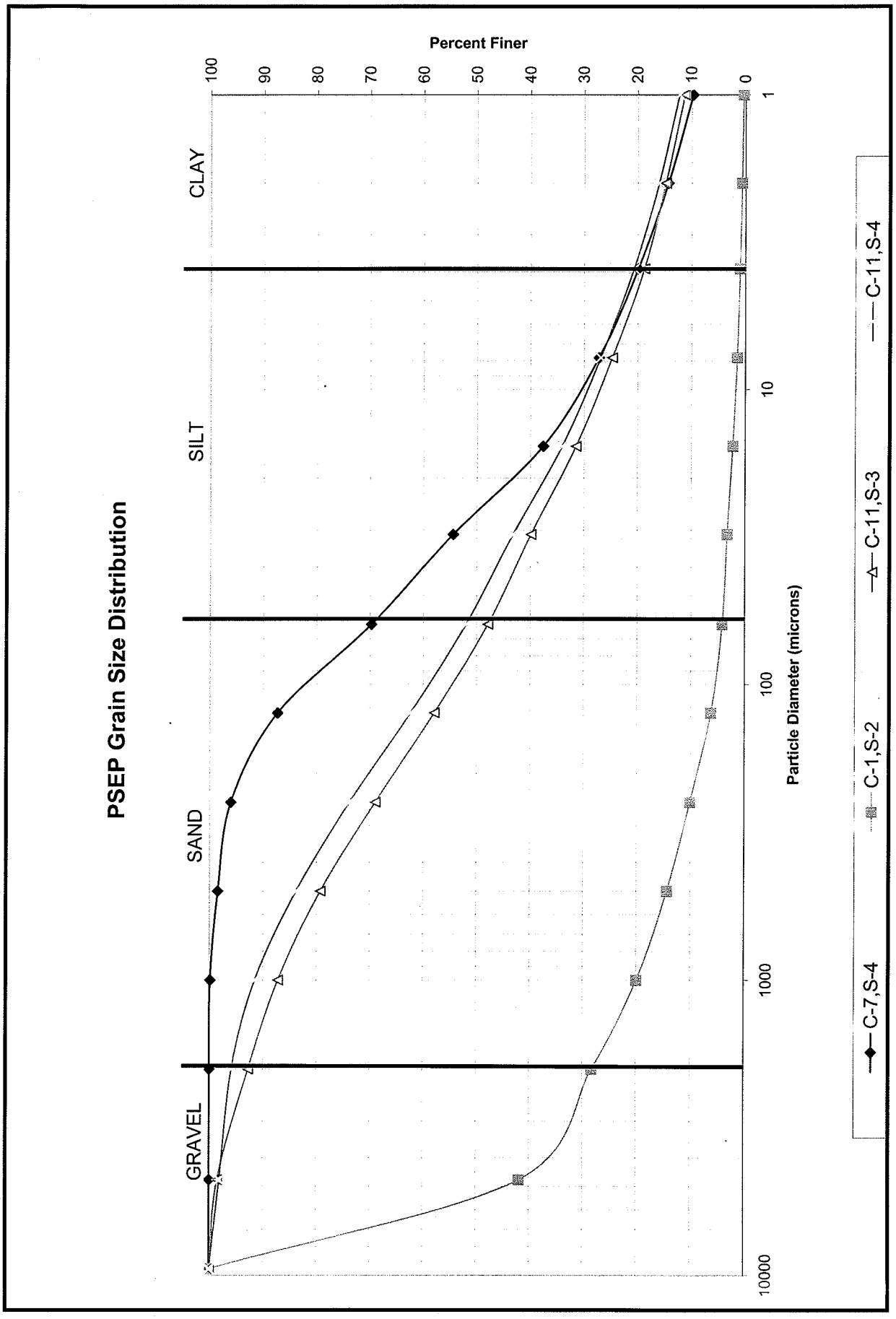
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

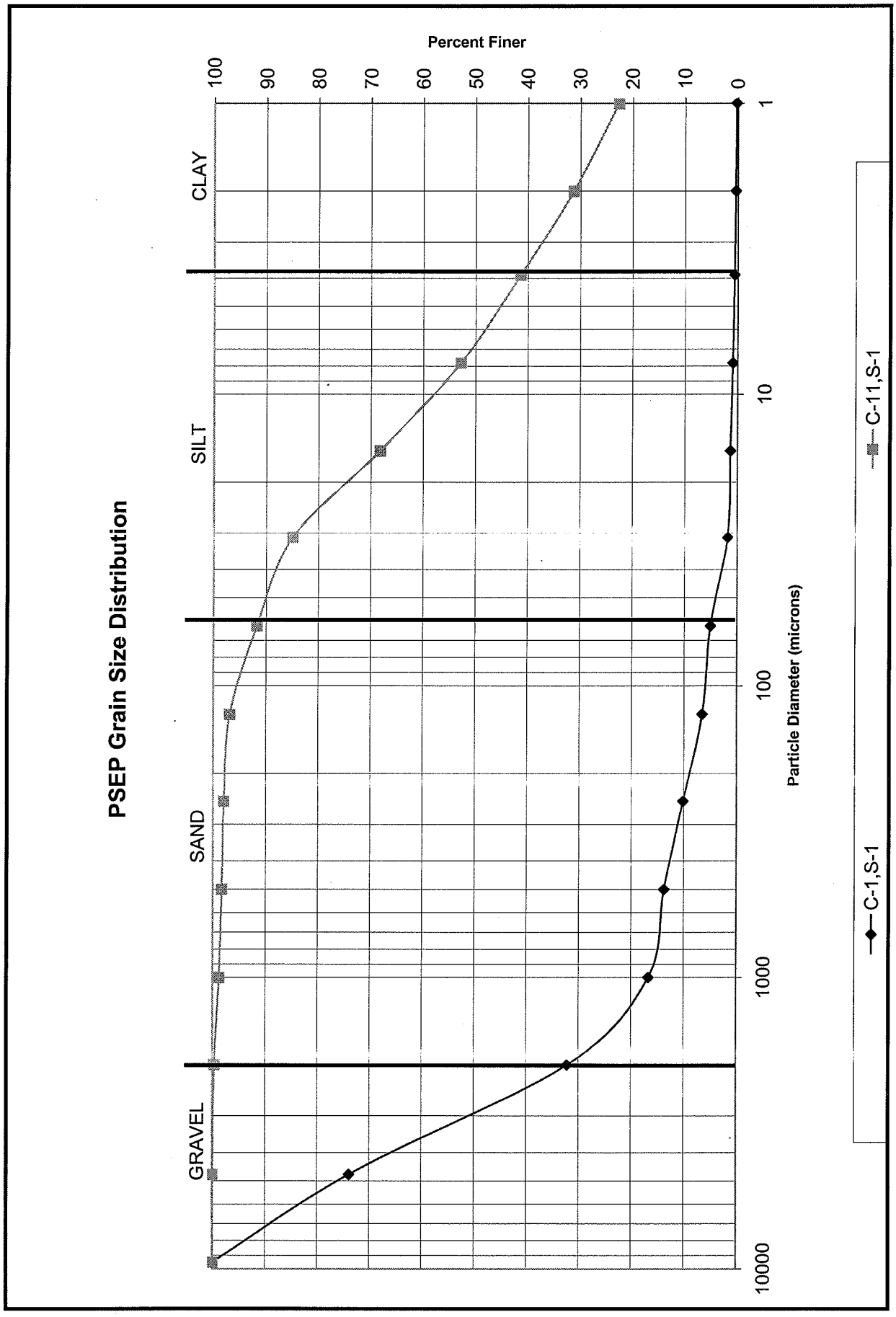
JP11

ANALYTICAL RESOURCES INCORPORATED




PSEP Grain Size Distribution
Percent Finer
100
90
80
70
60
50
40
30
20
10
0
CLAY
SILT
SAND
GRAVEL
1
10
100
1000
10000
Particle Diameter (microns)
C-7,S-4
C-1,S-2
C-11,S-3
C-11,S-4

ANALYTICAL RESOURCES INCORPORATED



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP75
Client Project: Klamath River Sediment Study 21-1-12195-003	

Case Narrative

1. The samples were submitted for grain size analysis according to PSEP methodology.
2. The samples were run in a single batch, and one sample was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Sample J-3,S-1 was mostly gravel and contained fewer than the required 5 grams in the pipette portion of the analysis. When this occurs, we generally run the samples anyway, and flag the data. Our balance has a capacity of about 200 g (by 0.0001), and a sample size that would give 5 grams of fines could not be split and stay within the capacity of the balance.
4. Samples J-1,S-1 and J-5,S-1 and J-4,S-1 contained woody matter, which may have broken down during the sieving process, affecting grain size analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in this project.

Approved by: Taylor McKenzie Date: 8/3/06
Title: Lead Technician

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DATA QUALIFIERS FOR PHYSICAL ANALYSES

SM Indicates that the sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with moisture content, porosity, and saturation calculations that assume only water is present. It can also cause particles to adhere to one another, causing errors in grain size distribution analyses.

SS Indicates that the sample was not appropriate for the method requested because it did not contain the proportion of "fines'" required to perform the pipette portion of the analysis.

W Indicates that the amount of sample in some pipette readings was below the level required for accurate weighing, resulting in negative weights, which were adjusted to eliminate the negative value.

F Indicates that the samples were frozen prior to particle size determination.

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-003

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.0	98.6	97.7	96.3	93.8	88.8	76.8	58.8	47.7
C-6,S-1	100.0	100.0	99.9	99.6	99.2	99.0	98.6	97.8	97.1	94.8	90.2	77.4	60.2	48.6
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.1	98.8	97.9	97.1	94.5	92.7	77.0	60.1	48.5
J-3,S-1A	100.0	84.2	57.8	43.5	33.4	26.1	21.2	16.9	13.6	9.6	6.8	4.7	3.5	2.9
J-1,S-1	100.0	100.0	99.9	99.8	98.1	95.9	92.4	86.3	83.3	73.9	62.9	46.5	34.2	27.3
J-3,S-1	100.0	30.8	22.7	19.4	12.3	4.6	2.1	1.1	NA	NA	NA	NA	NA	NA
J-5,S-1	100.0	100.0	99.9	99.8	98.2	87.4	31.0	19.8	17.0	13.7	11.2	8.5	6.0	4.4
J-4,S-1	100.0	98.2	98.2	97.9	96.7	86.2	47.5	38.9	36.8	32.9	28.4	21.7	15.5	11.6

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP75

GEC
Klamath River Sediment Study 21-1-12195-003

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C-6,S-1	0.0	0.1	0.4	0.5	0.4	0.9	1.4	2.4	5.0	12.1	18.0	11.2	47.7
C-6,S-1	0.1	0.3	0.3	0.3	0.3	0.8	0.7	2.3	4.6	12.8	17.2	11.6	48.6
C-6,S-1	0.0	0.1	0.4	0.4	0.3	0.9	0.8	2.6	1.8	15.7	16.8	11.6	48.5
J-3,S-1A	42.2	14.4	10.0	7.3	4.9	4.3	3.4	3.9	2.8	2.1	1.2	0.5	2.9
J-1,S-1	0.1	0.2	1.6	2.3	3.5	6.1	3.0	9.4	11.0	16.4	12.3	7.0	27.3
J-3,S-1	77.3	3.4	7.0	7.7	2.5	1.0	1.1	NA	NA	NA	NA	NA	NA
J-5,S-1	0.1	0.1	1.6	10.8	56.4	11.2	2.7	3.3	2.5	2.7	2.5	1.6	4.4
J-4,S-1	1.8	0.3	1.3	10.4	38.7	8.6	2.1	3.9	4.5	6.7	6.1	4.0	11.6

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP75

GEC
Klamath River Sediment Study 21-1-12195-003

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C-6,S-1	24.7
C-6,S-1	24.6
C-6,S-1	24.7
J-3,S-1A	64.3
J-1,S-1	22.4
J-3,S-1	88.5
J-5,S-1	43.1
J-4,S-1	36.7

Triplicate Average	24.7
Standard Deviation	0.04
%RSD	0.18

(Total Solids at 90 C)

JP75

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-003
ARI Triplicate Sample ID:	JP58 D	Batch No.:	JP75 -1
Client Triplicate Sample ID:	C-6,S-1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.0	98.6	97.7	96.3	93.8	88.8	76.8	58.8	47.7
C-6,S-1	100.0	100.0	99.9	99.6	99.2	99.0	98.6	97.8	97.1	94.8	90.2	77.4	60.2	48.6
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.1	98.8	97.9	97.1	94.5	92.7	77.0	60.1	48.5
AVE	NA	100.00	99.95	99.79	99.41	99.03	98.66	97.79	96.83	94.38	90.59	77.06	59.73	48.25
STDEV	NA	0.00	0.08	0.19	0.14	0.08	0.10	0.12	0.49	0.49	1.97	0.32	0.78	0.51
%RSD	NA	0.00	0.08	0.19	0.14	0.08	0.11	0.12	0.51	0.52	2.17	0.41	1.30	1.07

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete .	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C-6,S-1	7/11/06	7/24/06	8/2/06	96.2		10.6
C-6,S-1	7/11/06	7/24/06	8/2/06	95.6		10.6
C-6,S-1	7/11/06	7/24/06	8/2/06	96.0		11.0
J-3,S-1A	7/13/06	7/24/06	8/2/06	100.8		15.8
J-1,S-1	7/14/06	7/24/06	8/2/06	96.6		10.6
J-3,S-1	7/13/06	7/24/06	8/2/06	98.7	SS	1.5
J-5,S-1	7/14/06	7/24/06	8/2/06	100.2		5.3
J-4,S-1	7/14/06	7/24/06	8/2/06	98.5		8.0

* ARI Internal QA limits = 95-105%

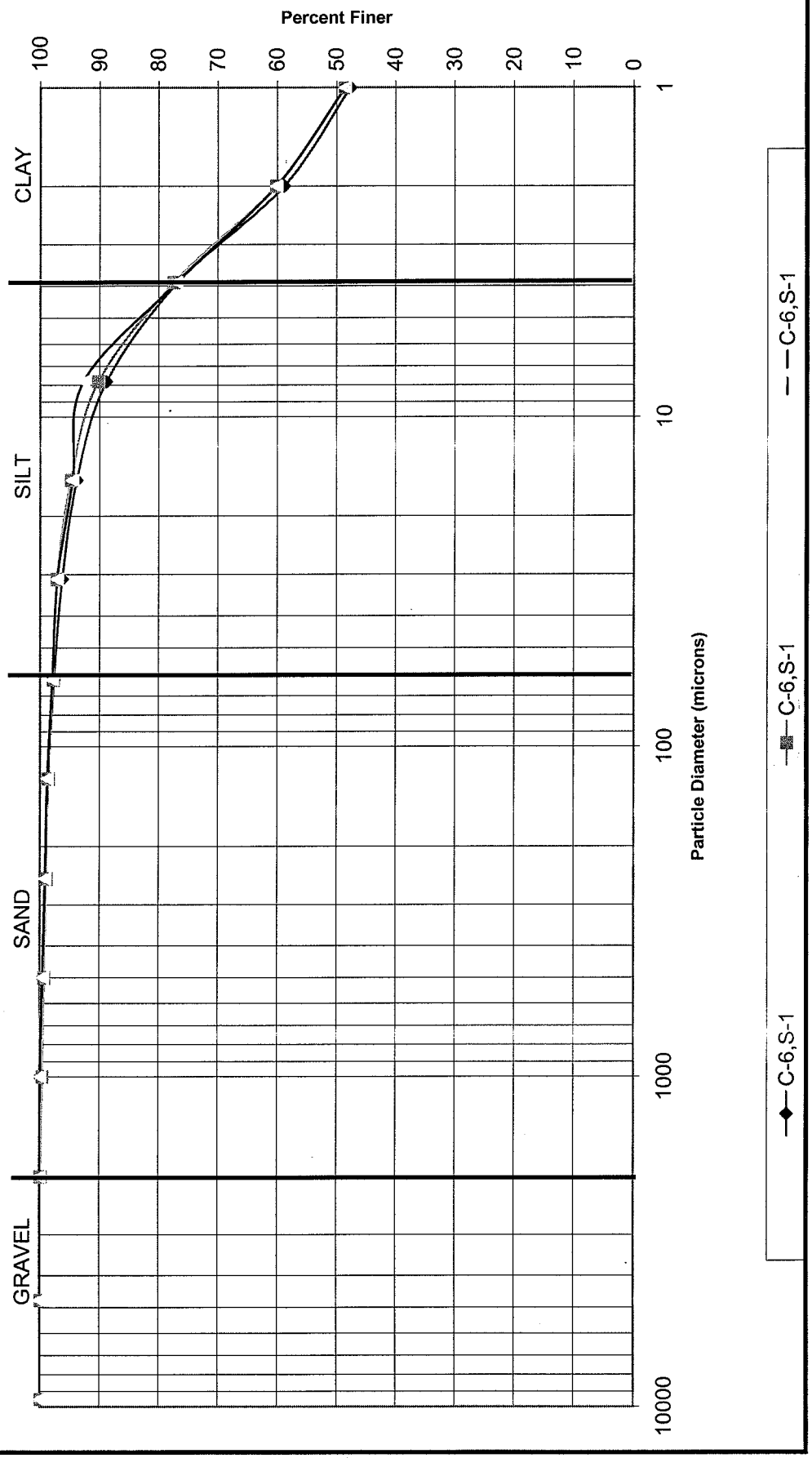
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

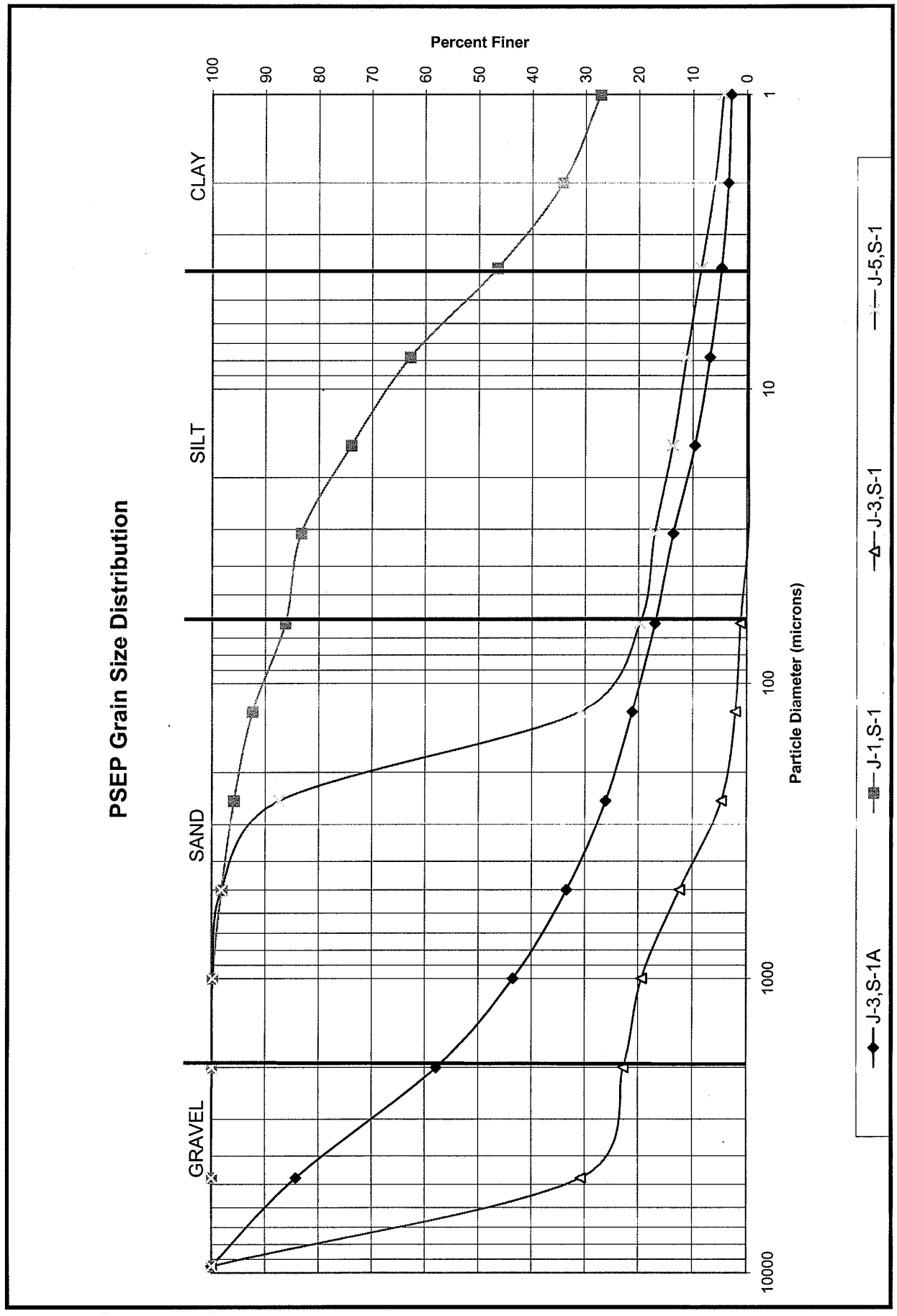
ANALYTICAL RESOURCES INCORPORATED

PSEP Grain Size Distribution

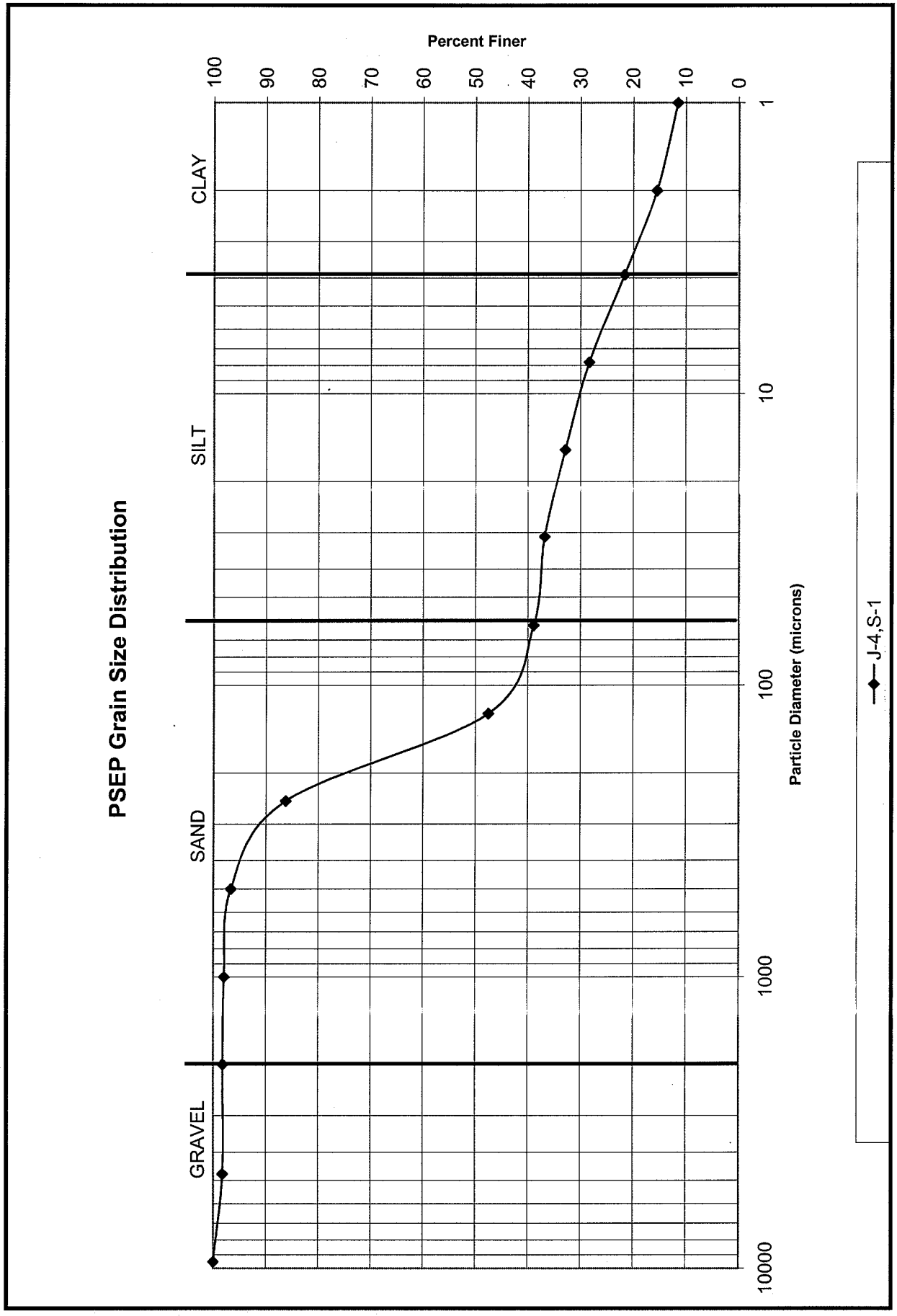
Triplicate Sample Plot



ANALYTICAL RESOURCES INCORPORATED



ANALYTICAL RESOURCES INCORPORATED



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JO60
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Three samples were received on July 3, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from this job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Smith Date: 7/26/06
Title: Lead Technician

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ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
C3-S4A	100.0	100.0	99.8	99.0	97.0	93.8	87.5	77.7	65.2	52.0	37.8	29.0	21.9	17.2
C3-S4B	100.0	100.0	99.0	97.1	93.6	90.6	87.1	83.0	81.8	75.0	64.7	47.3	34.2	21.1

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JO60

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C3-S1	0.0	0.1	0.2	0.4	0.7	2.1	0.5	5.9	12.1	17.0	15.9	14.5	30.6
C3-S1	0.0	0.1	0.5	1.4	1.9	2.2	0.3	4.2	12.9	17.1	15.3	14.4	29.8
C3-S1	0.0	0.0	0.6	1.2	1.6	2.3	0.6	4.6	12.5	16.9	16.1	15.0	28.6
C3-S4A	0.2	0.8	1.9	3.2	6.3	9.8	12.4	13.3	14.1	8.9	7.0	4.7	17.2
C3-S4B	1.0	1.9	3.6	3.0	3.5	4.1	1.2	6.9	10.3	17.4	13.1	13.1	21.1

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JO60

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C3-S1	24.4
C3-S1	24.0
C3-S1	24.1
C3-S4A	72.9
C3-S4B	29.7

Triplicate Average	24.2
Standard Deviation	0.20
%RSD	0.83

(Total Solids at 90 C)

JO60

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-002
ARI Triplicate Sample ID:	JO60 A	Batch No.:	JO60 -1
Client Triplicate Sample ID:	C3-S1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
AVE	NA	100.00	100.00	99.94	99.52	98.54	97.15	94.93	94.43	89.54	77.03	60.02	44.27	29.65
STDEV	NA	0.00	0.00	0.01	0.21	0.73	1.33	1.40	1.35	0.57	0.84	0.82	0.80	1.02
%RSD	NA	0.00	0.00	0.01	0.21	0.74	1.37	1.47	1.43	0.64	1.09	1.36	1.81	3.44

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C3-S1	6/30/2006	7/18/2006	7/24/2006	98.2		10.9
C3-S1	6/30/2006	7/18/2006	7/24/2006	95.5		10.8
C3-S1	6/30/2006	7/18/2006	7/24/2006	95.5		10.3
C3-S4A	6/30/2006	7/18/2006	7/24/2006	98.1		12.2
C3-S4B	6/30/2006	7/18/2006	7/24/2006	95.2		9.2

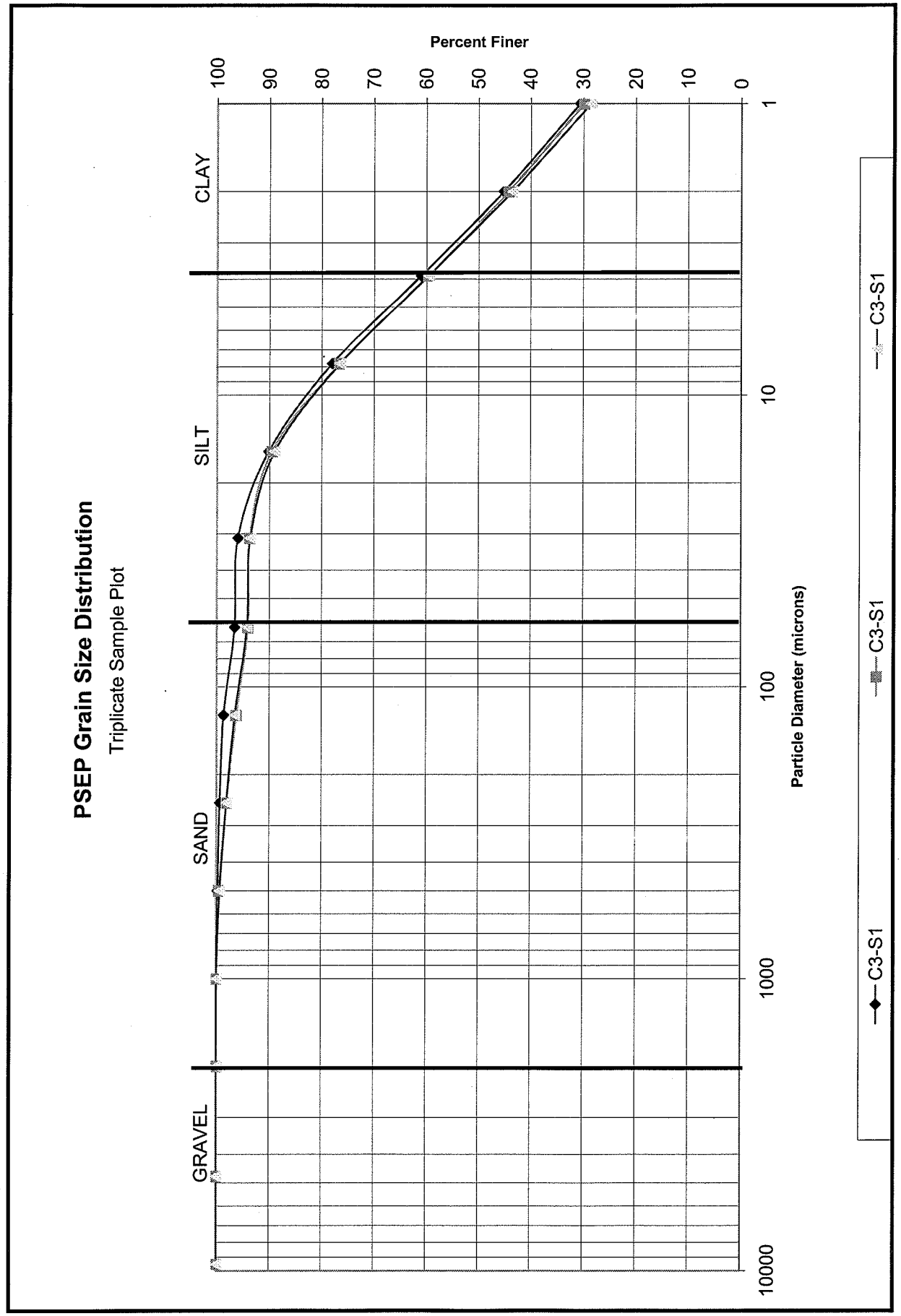
* ARI Internal QA limits = 95-105%

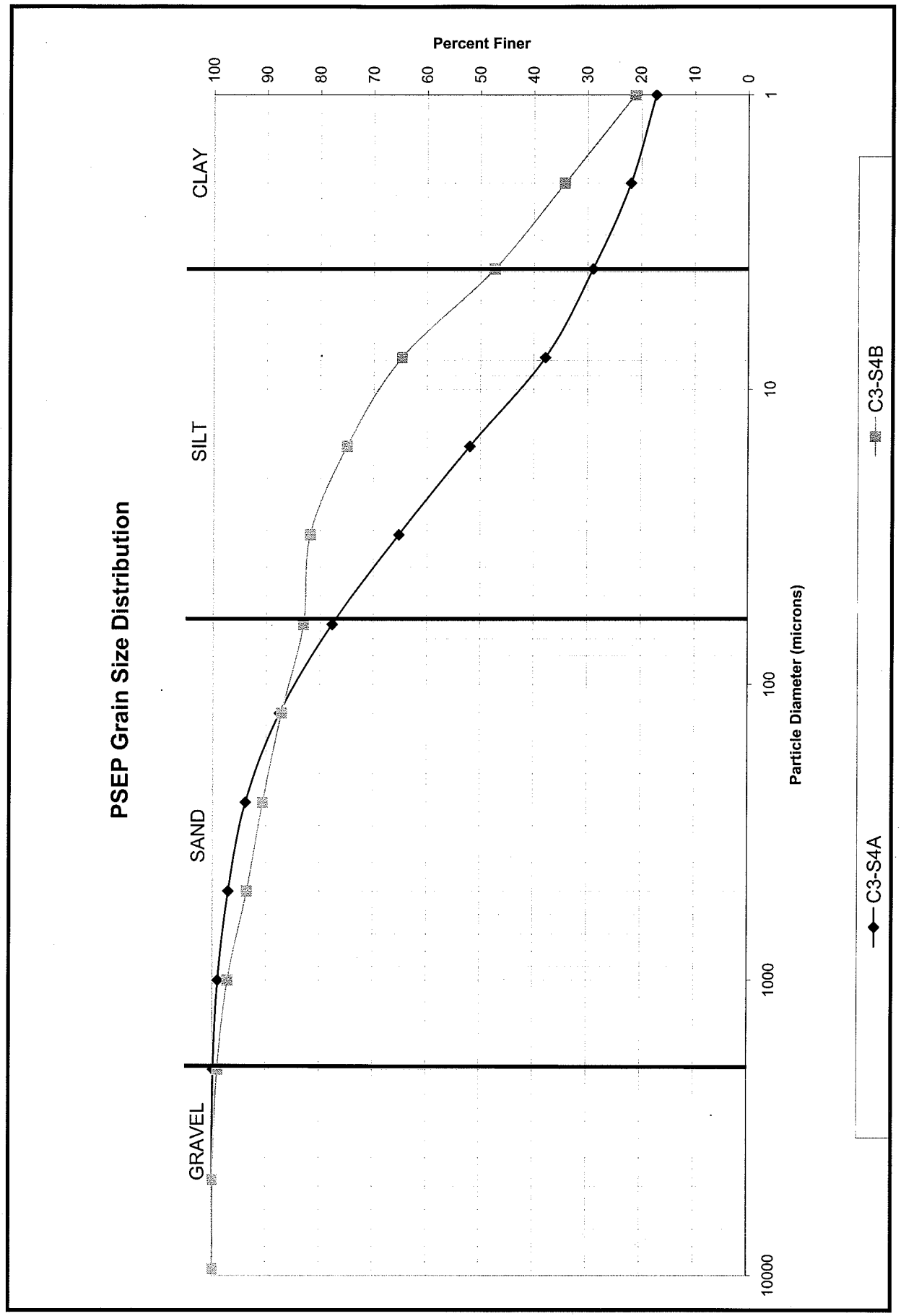
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JO60

ANALYTICAL RESOURCES INCORPORATED




PSEP Grain Size Distribution
Percent Finer
100
90
80
70
60
50
40
30
20
10
0
CLAY
SILT
SAND
GRAVEL
1
10
100
1000
10000
Particle Diameter (microns)
C3-S4B
C3-S4A

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP03
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Five samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gregory Smith Date: 7/26/06
Title: Lead Technician

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ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
C-9,S-3	100.0	89.5	83.1	76.7	68.0	58.6	49.1	40.7	36.0	28.9	23.2	17.6	13.3	9.9
C-9,S-1	100.0	100.0	100.0	99.8	99.2	98.1	96.5	93.5	92.9	85.9	75.0	58.3	42.0	28.6
C-2,S-1	100.0	98.5	98.5	98.1	95.2	91.8	83.4	68.9	61.6	48.7	38.2	27.9	20.1	13.6
C-2,S-4	100.0	99.8	99.8	99.7	98.6	97.1	93.4	83.3	74.1	52.5	40.5	31.6	22.1	14.8
C-2,S-5	100.0	100.0	100.0	99.8	98.2	95.9	92.5	85.1	80.8	63.7	46.8	36.5	25.2	17.4

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP03

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C3-S1	0.0	0.1	0.2	0.4	0.7	2.1	0.5	5.9	12.1	17.0	15.9	14.5	30.6
C3-S1	0.0	0.1	0.5	1.4	1.9	2.2	0.3	4.2	12.9	17.1	15.3	14.4	29.8
C3-S1	0.0	0.0	0.6	1.2	1.6	2.3	0.6	4.6	12.5	16.9	16.1	15.0	28.6
C-9,S-3	16.9	6.3	8.7	9.4	9.5	8.4	4.7	7.1	5.6	5.7	4.3	3.4	9.9
C-9,S-1	0.0	0.2	0.7	1.1	1.6	3.0	0.5	7.0	10.9	16.7	16.3	13.4	28.6
C-2,S-1	1.5	0.3	2.9	3.4	8.4	14.5	7.3	12.9	10.5	10.3	7.9	6.5	13.6
C-2,S-4	0.2	0.1	1.1	1.5	3.7	10.2	9.2	21.6	12.0	8.9	9.4	7.3	14.8
C-2,S-5	0.0	0.2	1.7	2.2	3.5	7.4	4.3	17.0	17.0	10.2	11.3	7.8	17.4

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP03

GEC
Klamath River Sediment Study 21-1-12195-002

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C3-S1	24.4
C3-S1	24.0
C3-S1	24.1
C-9,S-3	56.4
C-9,S-1	23.8
C-2,S-1	27.2
C-2,S-4	35.4
C-2,S-5	26.9

Triplicate Average	24.2
Standard Deviation	0.20
%RSD	0.83

(Total Solids at 90 C)

JP03

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-002
ARI Triplicate Sample ID:	JO60 A	Batch No.:	JP03 -1
Client Triplicate Sample ID:	C3-S1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
AVE	NA	100.00	100.00	99.94	99.52	98.54	97.15	94.93	94.43	89.54	77.03	60.02	44.27	29.65
STDEV	NA	0.00	0.00	0.01	0.21	0.73	1.33	1.40	1.35	0.57	0.84	0.82	0.80	1.02
%RSD	NA	0.00	0.00	0.01	0.21	0.74	1.37	1.47	1.43	0.64	1.09	1.36	1.81	3.44

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C3-S1	6/30/2006	7/18/2006	7/26/2006	98.2		10.9
C3-S1	6/30/2006	7/18/2006	7/26/2006	95.5		10.8
C3-S1	6/30/2006	7/18/2006	7/26/2006	95.5		10.3
C-9,S-3	7/8/2006	7/18/2006	7/26/2006	100.2		12.7
C-9,S-1	7/8/2006	7/18/2006	7/26/2006	96.6		9.0
C-2,S-1	7/7/2006	7/18/2006	7/26/2006	99.7		9.4
C-2,S-4	7/7/2006	7/18/2006	7/26/2006	100.3		11.1
C-2,S-5	7/7/2006	7/18/2006	7/26/2006	98.3		8.5

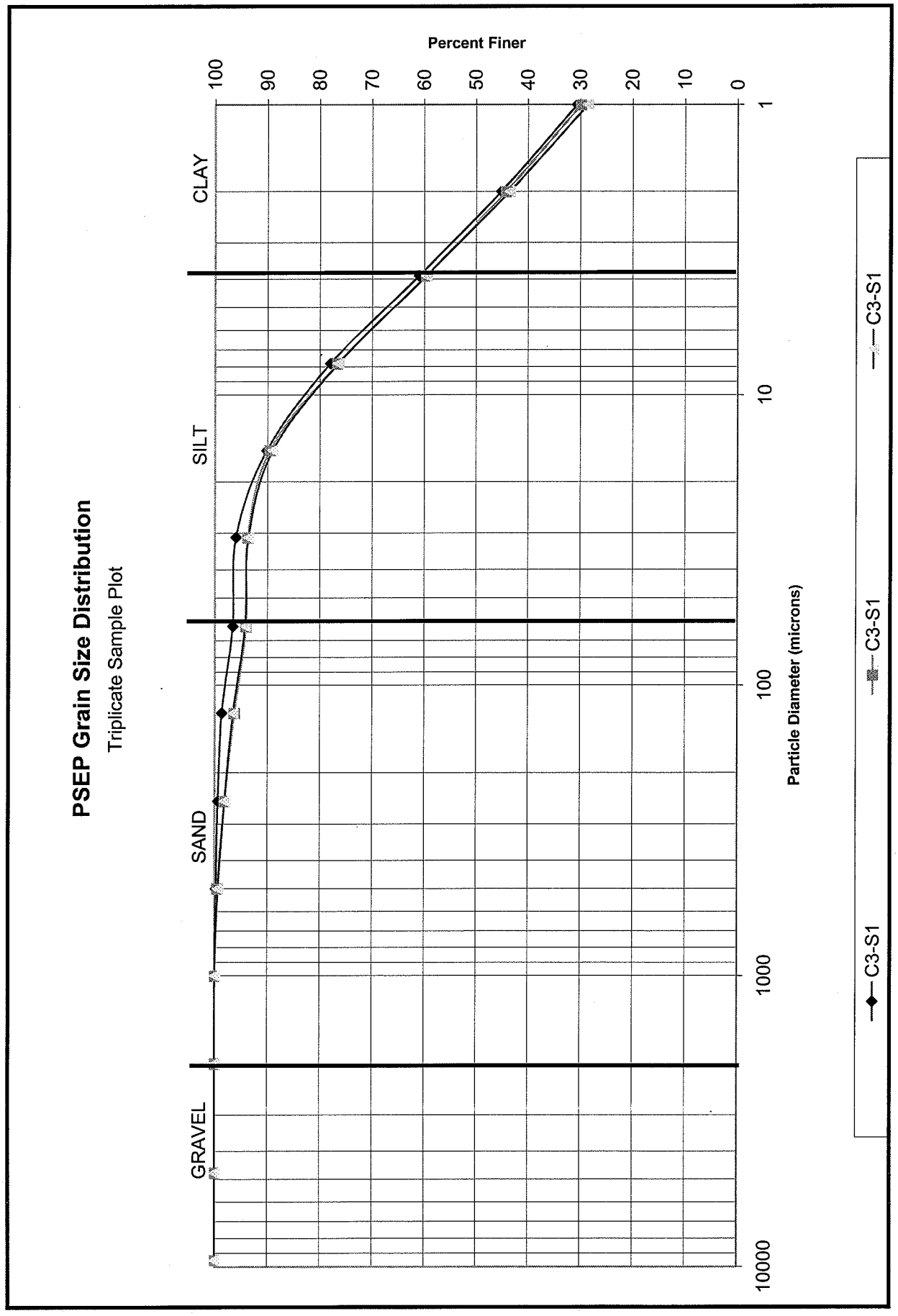
* ARI Internal QA limits = 95-105%

Notes to the Testing:

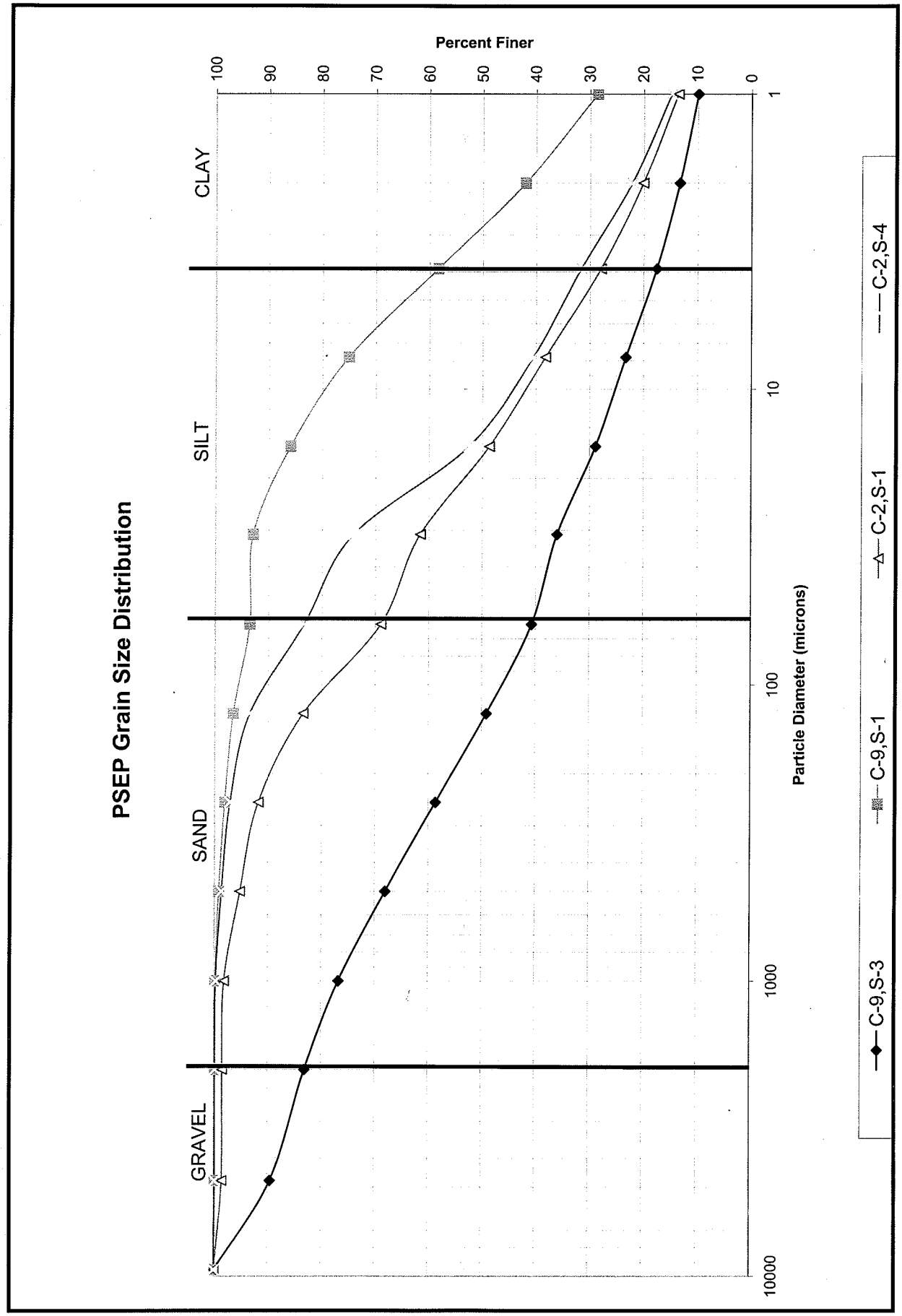
1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP03

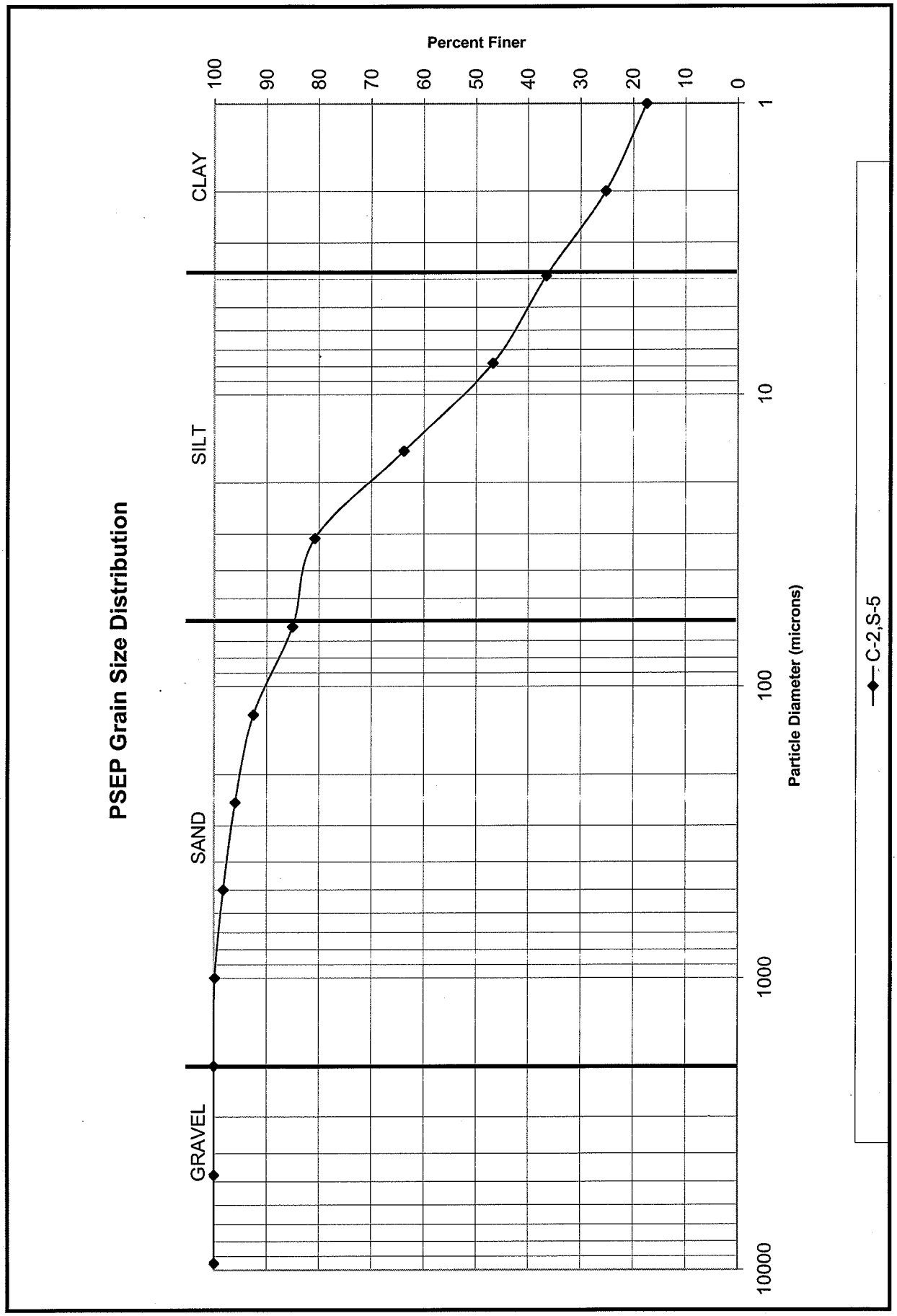
ANALYTICAL RESOURCES INCORPORATED



ANALYTICAL RESOURCES INCORPORATED



ANALYTICAL RESOURCES INCORPORATED



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP06
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Four samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Smith Date: 7/26/06
Title: Lead Technician

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
C-10,S-1	100.0	100.0	100.0	99.9	99.8	99.6	99.4	98.8	95.0	93.8	90.8	79.8	63.7	47.8
C-5,S-1	100.0	100.0	100.0	100.0	99.8	99.5	99.3	98.3	97.4	92.4	84.5	72.1	55.8	40.8
C-5,S-3/S-4	100.0	99.6	98.1	95.1	89.1	81.8	71.6	58.8	45.6	32.0	22.6	17.0	12.2	8.6
C-10,S-6	100.0	100.0	99.9	99.4	98.2	83.3	53.0	35.6	28.3	22.7	18.5	14.5	11.2	8.7

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP06

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C3-S1	0.0	0.1	0.2	0.4	0.7	2.1	0.5	5.9	12.1	17.0	15.9	14.5	30.6
C3-S1	0.0	0.1	0.5	1.4	1.9	2.2	0.3	4.2	12.9	17.1	15.3	14.4	29.8
C3-S1	0.0	0.0	0.6	1.2	1.6	2.3	0.6	4.6	12.5	16.9	16.1	15.0	28.6
C-10,S-1	0.0	0.1	0.1	0.2	0.2	0.6	3.8	1.2	3.0	11.0	16.1	15.9	47.8
C-5,S-1	0.0	0.0	0.2	0.2	0.3	1.0	0.9	5.0	7.9	12.4	16.3	15.0	40.8
C-5,S-3/S-4	1.9	3.0	6.0	7.3	10.2	12.8	13.2	13.6	9.4	5.6	4.8	3.6	8.6
C-10,S-6	0.1	0.5	1.1	14.9	30.3	17.4	7.3	5.6	4.2	4.0	3.3	2.5	8.7

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP06

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C3-S1	24.4
C3-S1	24.0
C3-S1	24.1
C-10,S-1	25.1
C-5,S-1	26.5
C-5,S-3/S-4	61.2
C-10,S-6	64.6

Triplicate Average	24.2
Standard Deviation	0.20
%RSD	0.83

(Total Solids at 90 C)

JP06

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-002
ARI Triplicate Sample ID:	JO60 A	Batch No.:	JP06 -1
Client Triplicate Sample ID:	C3-S1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
AVE	NA	100.00	100.00	99.94	99.52	98.54	97.15	94.93	94.43	89.54	77.03	60.02	44.27	29.65
STDEV	NA	0.00	0.00	0.01	0.21	0.73	1.33	1.40	1.35	0.57	0.84	0.82	0.80	1.02
%RSD	NA	0.00	0.00	0.01	0.21	0.74	1.37	1.47	1.43	0.64	1.09	1.36	1.81	3.44

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C3-S1	6/30/2006	7/18/2006	7/26/2006	98.2		10.9
C3-S1	6/30/2006	7/18/2006	7/26/2006	95.5		10.8
C3-S1	6/30/2006	7/18/2006	7/26/2006	95.5		10.3
C-10,S-1	7/9/2006	7/18/2006	7/26/2006	95.9		9.6
C-5,S-1	7/9/2006	7/18/2006	7/26/2006	96.5		10.1
C-5,S-3/S-4	7/9/2006	7/18/2006	7/26/2006	99.1		16.4
C-10,S-6	7/9/2006	7/18/2006	7/26/2006	99.3		11.7

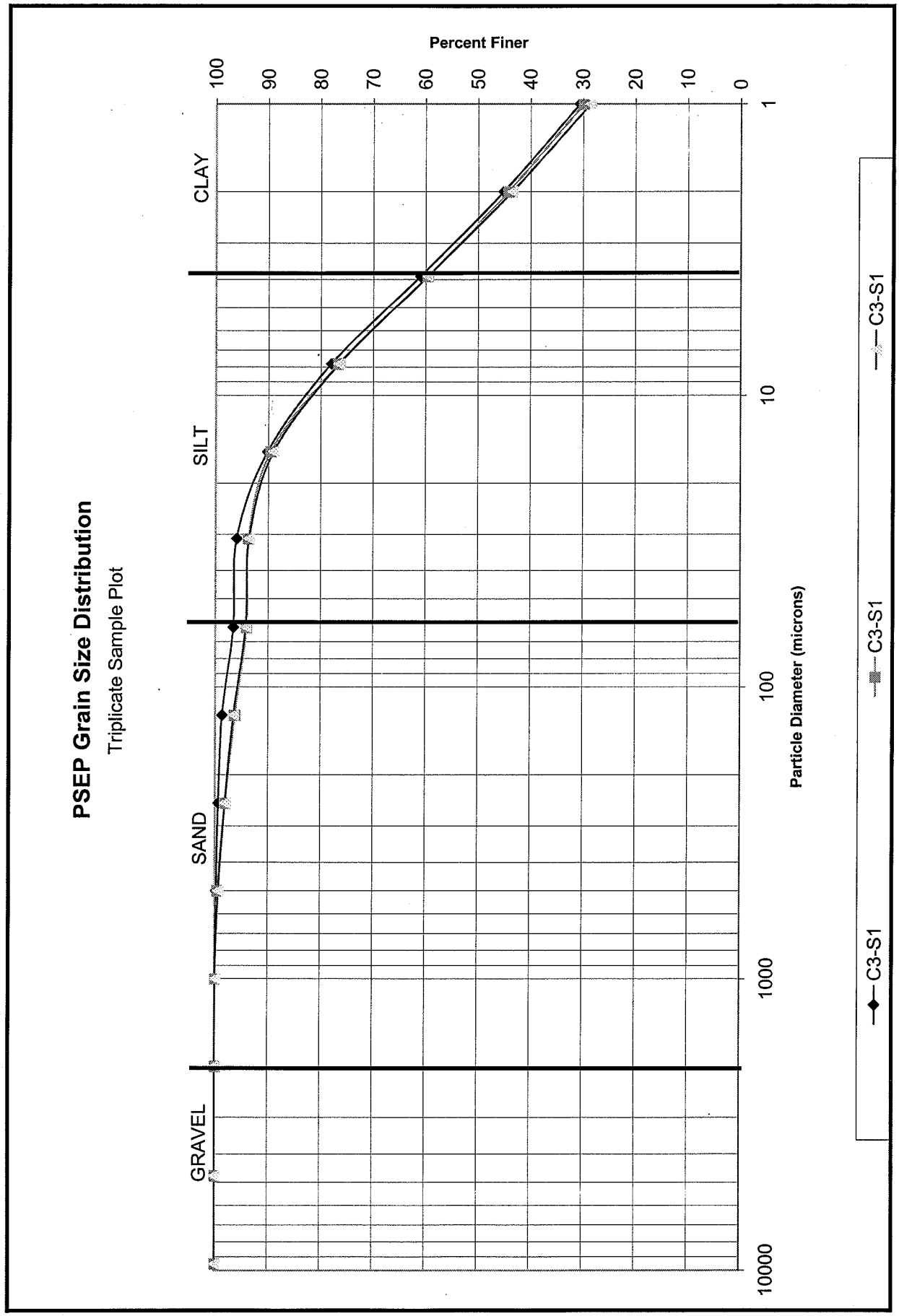
* ARI Internal QA limits = 95-105%

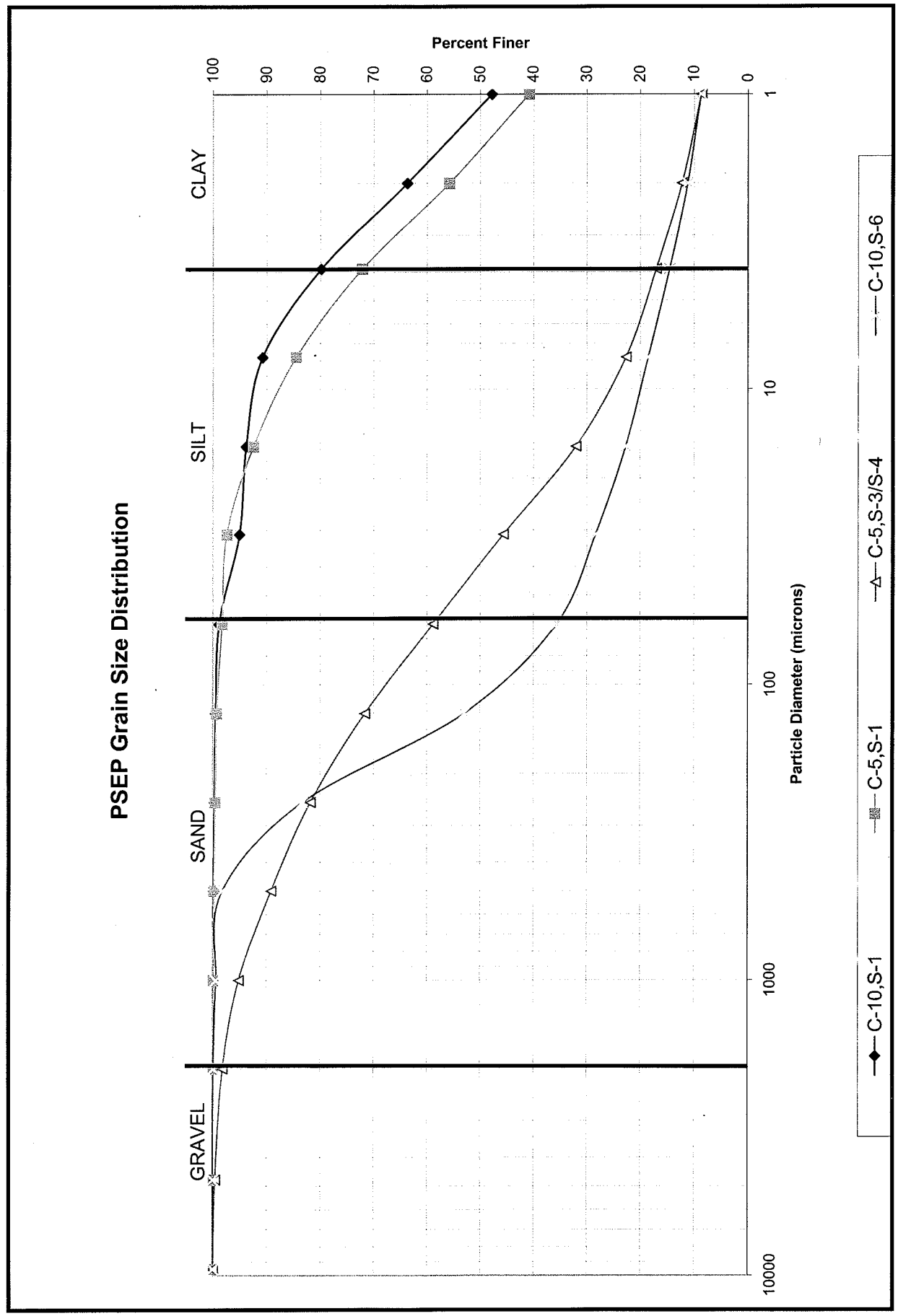
Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP06

ANALYTICAL RESOURCES INCORPORATED




PSEP Grain Size Distribution
Percent Finer
100
90
80
70
60
50
40
30
20
10
0
CLAY
SILT
SAND
GRAVEL
1
10
100
1000
10000
Particle Diameter (microns)
C-10,S-1
C-5,S-1
C-5,S-3/S-4
C-10,S-6

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP12
Client Project: Klamath River Sediment Study, 21-1-12195-002	

Case Narrative

1. Four samples were received on July 11, 2006, and were in good condition.
2. The samples were submitted for grain size analysis according to Puget Sound Estuary Protocols (PSEP) methodology.
3. The triplicate was chosen on one sample from another job, which is reported in the attached QA summary.
4. PSEP methodology calls for between 5 to 25 grams of sediment passing the #230 sieve for the pipette portion of the analysis.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in the samples or methods on this project.

Approved by: Gwenna Smith Date: 7/26/06
Title: Lead Technician

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ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
C-4,S-6	100.0	100.0	100.0	99.9	99.4	98.7	97.5	95.2	94.2	90.5	83.1	69.1	51.8	37.2
C-8,S-3	100.0	100.0	99.9	98.6	97.5	96.1	92.7	82.8	74.7	56.3	46.4	36.7	27.2	19.8
C-8,S-1	100.0	100.0	97.9	95.9	94.6	93.2	89.6	81.0	75.9	60.0	50.3	38.0	27.1	18.8
C-4,S-1	100.0	100.0	100.0	99.3	98.7	98.1	97.2	95.0	93.1	85.7	72.5	57.2	41.2	29.2

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP12

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C3-S1	0.0	0.1	0.2	0.4	0.7	2.1	0.5	5.9	12.1	17.0	15.9	14.5	30.6
C3-S1	0.0	0.1	0.5	1.4	1.9	2.2	0.3	4.2	12.9	17.1	15.3	14.4	29.8
C3-S1	0.0	0.0	0.6	1.2	1.6	2.3	0.6	4.6	12.5	16.9	16.1	15.0	28.6
C-4,S-6	0.0	0.1	0.5	0.7	1.2	2.3	1.1	3.7	7.4	14.0	17.3	14.6	37.2
C-8,S-3	0.1	1.3	1.2	1.4	3.4	9.8	8.1	18.4	9.9	9.7	9.5	7.4	19.8
C-8,S-1	2.1	2.0	1.2	1.4	3.6	8.6	5.1	15.9	9.7	12.3	10.9	8.3	18.8
C-4,S-1	0.0	0.7	0.6	0.6	1.0	2.2	1.9	7.4	13.2	15.4	16.0	12.1	29.2

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP12

GEC
Klamath River Sediment Study 21-1-12195-002

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C3-S1	24.4
C3-S1	24.0
C3-S1	24.1
C-4,S-6	25.6
C-8,S-3	30.2
C-8,S-1	24.2
C-4,S-1	24.6

Triplicate Average	24.2
Standard Deviation	0.20
%RSD	0.83

(Total Solids at 90 C)

JP12

QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-002
ARI Triplicate Sample ID:	JO60 A	Batch No.:	JP12 -1
Client Triplicate Sample ID:	C3-S1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C3-S1	100.0	100.0	100.0	99.9	99.7	99.4	98.7	96.5	96.0	90.1	78.0	61.0	45.1	30.6
C3-S1	100.0	100.0	100.0	99.9	99.5	98.1	96.3	94.0	93.7	89.5	76.6	59.5	44.2	29.8
C3-S1	100.0	100.0	100.0	100.0	99.3	98.1	96.5	94.2	93.6	89.0	76.5	59.6	43.5	28.6
AVE	NA	100.00	100.00	99.94	99.52	98.54	97.15	94.93	94.43	89.54	77.03	60.02	44.27	29.65
STDEV	NA	0.00	0.00	0.01	0.21	0.73	1.33	1.40	1.35	0.57	0.84	0.82	0.80	1.02
%RSD	NA	0.00	0.00	0.01	0.21	0.74	1.37	1.47	1.43	0.64	1.09	1.36	1.81	3.44

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C3-S1	6/30/2006	7/18/2006	7/26/2006	98.2		10.9
C3-S1	6/30/2006	7/18/2006	7/26/2006	95.5		10.8
C3-S1	6/30/2006	7/18/2006	7/26/2006	95.5		10.3
C-4,S-6	7/7/2006	7/18/2006	7/26/2006	95.4		8.2
C-8,S-3	7/7/2006	7/18/2006	7/26/2006	97.8		10.8
C-8,S-1	7/7/2006	7/18/2006	7/26/2006	98.8		9.9
C-4,S-1	7/7/2006	7/18/2006	7/26/2006	97.6		10.2

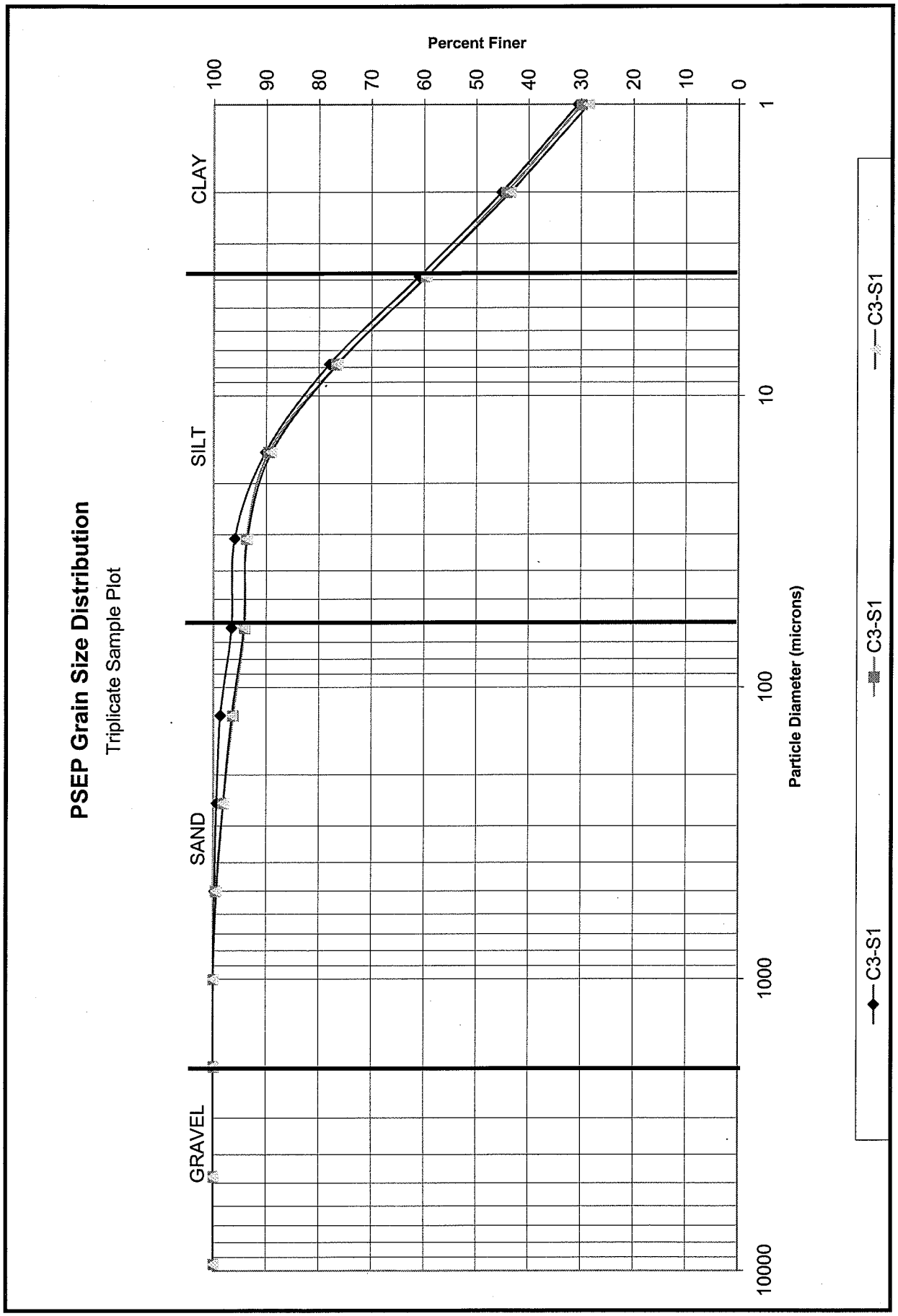
* ARI Internal QA limits = 95-105%

Notes to the Testing:

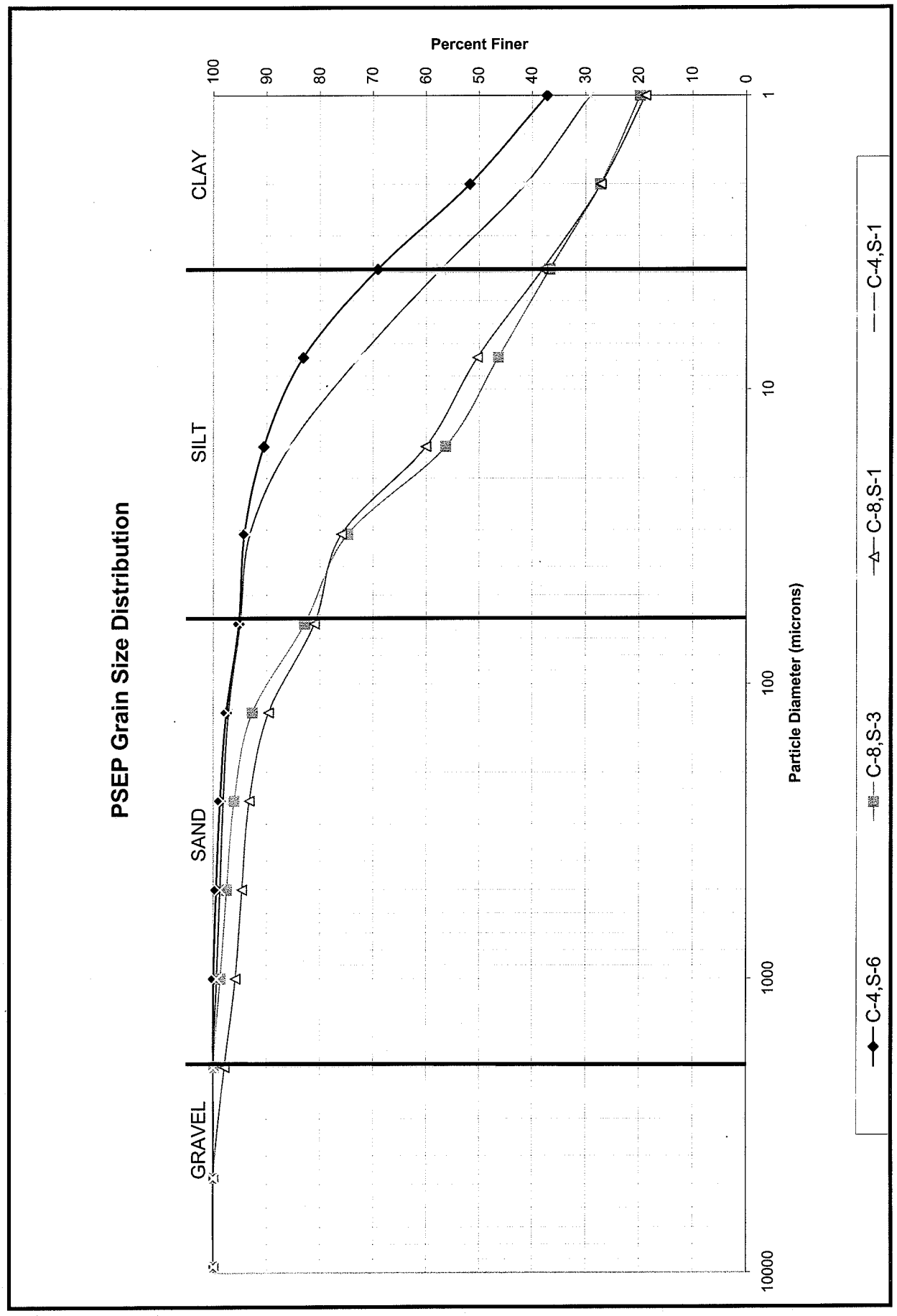
1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP12

ANALYTICAL RESOURCES INCORPORATED



ANALYTICAL RESOURCES INCORPORATED



Analytical Resources, Incorporated
Analytical Chemists and Consultants

Client: GEC	Project No.: JP58
Client Project: Klamath River Sediment Study 21-1-12195-002	

Case Narrative

1. The samples were submitted for grain size analysis according to PSEP methodology.
2. The samples were run in a single batch, and one sample was chosen for triplicate analysis. The triplicate data is reported on the QA summary.
3. Sample C-12,S-2C/3C contained abundant woody matter, which may have broken down during the sieving process, affecting grain size analysis.
4. The after moisture content was used for sample C-12,S-4 to eliminate a negative number.
5. The data is provided in summary tables and plots.
6. There were no other noted anomalies in this project.

Approved by: taylor McKenzie Date: 8/3/06
Title: Lead Technician

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ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Finer Than Indicated Size

Sample No.	Gravel			Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt				Clay	
Phi Size	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
Sieve Size (microns)	3/8"	#4	#10 (2000)	#18 (1000)	#35 (500)	#60 (250)	#120 (125)	#230 (62)	31.00	15.60	7.80	3.90	2.00	1.00
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.0	98.6	97.7	96.3	93.8	88.8	76.8	58.8	47.7
C-6,S-1	100.0	100.0	99.9	99.6	99.2	99.0	98.6	97.8	97.1	94.8	90.2	77.4	60.2	48.6
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.1	98.8	97.9	97.1	94.5	92.7	77.0	60.1	48.5
C-12,S-1C	100.0	99.2	97.9	95.3	73.6	27.6	12.1	7.1	5.2	3.7	2.7	1.8	1.2	0.8
C-12,S-4	100.0	60.0	36.5	25.7	18.0	12.9	9.3	6.9	5.6	3.8	2.7	1.9	1.4	1.1
C-12,S-2C/3C	100.0	99.7	96.8	90.8	83.1	75.7	62.0	47.1	42.1	34.9	28.7	22.1	15.5	11.5

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

JP58

ANALYTICAL RESOURCES INCORPORATED

GEC
Klamath River Sediment Study 21-1-12195-002

Apparent Grain Size Distribution Summary
Percent Retained in Each Size Fraction

Sample No.	Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Coarse Silt	Medium Silt	Fine Silt	Very Fine Silt	Clay		
Phi Size	> -1	-1 to 0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	< 10
Sieve Size (microns)	> #10 (2000)	10 to 18 (2000-1000)	18-35 (1000-500)	35-60 (500-250)	60-120 (250-125)	120-230 (125-62)	62.5-31.0	31.0-15.6	15.6-7.8	7.8-3.9	3.9-2.0	2.0-1.0	<1.0
C-6,S-1	0.0	0.1	0.4	0.5	0.4	0.9	1.4	2.4	5.0	12.1	18.0	11.2	47.7
C-6,S-1	0.1	0.3	0.3	0.3	0.3	0.8	0.7	2.3	4.6	12.8	17.2	11.6	48.6
C-6,S-1	0.0	0.1	0.4	0.4	0.3	0.9	0.8	2.6	1.8	15.7	16.8	11.6	48.5
C-12,S-1C	2.1	2.6	21.7	46.0	15.5	4.9	1.9	1.5	1.0	0.9	0.6	0.4	0.8
C-12,S-4	63.5	10.8	7.6	5.2	3.5	2.5	1.3	1.7	1.2	0.8	0.5	0.3	1.1
C-12,S-2C/3C	3.2	6.0	7.7	7.4	13.7	14.9	5.0	7.2	6.2	6.6	6.6	4.0	11.5

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

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GEC
Klamath River Sediment Study 21-1-12195-002

PSEP Total Solids Analysis
Percent of Wet Weight

Sample No.	Total Solids (%)
C-6,S-1	24.7
C-6,S-1	24.6
C-6,S-1	24.7
C-12,S-1C	68.8
C-12,S-4	84.4
C-12,S-2C/3C	32.8

Triplicate Average	24.7
Standard Deviation	0.04
%RSD	0.18

(Total Solids at 90 C)

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QA SUMMARY

ANALYTICAL RESOURCES INCORPORATED

PROJECT:	GEC	Project No.:	Klamath River Sediment Study 21-1-12195-002
ARI Triplicate Sample ID:	JP58 D	Batch No.:	JP58 -1
Client Triplicate Sample ID:	C-6,S-1	Page:	1 of 1

Relative Standard Deviation, By Phi Size

Sample ID	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.0	98.6	97.7	96.3	93.8	88.8	76.8	58.8	47.7
C-6,S-1	100.0	100.0	99.9	99.6	99.2	99.0	98.6	97.8	97.1	94.8	90.2	77.4	60.2	48.6
C-6,S-1	100.0	100.0	100.0	99.9	99.5	99.1	98.8	97.9	97.1	94.5	92.7	77.0	60.1	48.5
AVE	NA	100.00	99.95	99.79	99.41	99.03	98.66	97.79	96.83	94.38	90.59	77.06	59.73	48.25
STDEV	NA	0.00	0.08	0.19	0.14	0.08	0.10	0.12	0.49	0.49	1.97	0.32	0.78	0.51
%RSD	NA	0.00	0.08	0.19	0.14	0.08	0.11	0.12	0.51	0.52	2.17	0.41	1.30	1.07

The Triplicate Applies To The Following Samples

Client ID	Date Sampled	Date Extracted	Date Complete	QA Ratio (95-105)	Data Qualifiers	Pipette Portion (5.0-25.0g)
C-6,S-1	7/11/06	7/24/06	8/2/06	96.2		10.6
C-6,S-1	7/11/06	7/24/06	8/2/06	95.6		10.6
C-6,S-1	7/11/06	7/24/06	8/2/06	96.0		11.0
C-12,S-1C	7/11/06	7/24/06	8/2/06	100.5		7.5
C-12,S-4	7/11/06	7/24/06	8/2/06	98.6		8.7
C-12,S-2C/3C	7/11/06	7/24/06	8/2/06	98.1		8.1

* ARI Internal QA limits = 95-105%

Notes to the Testing:

1. Organic matter was not removed prior to testing, thus the reported values are the "apparent" grain size distribution. See narrative for discussion of the testing.

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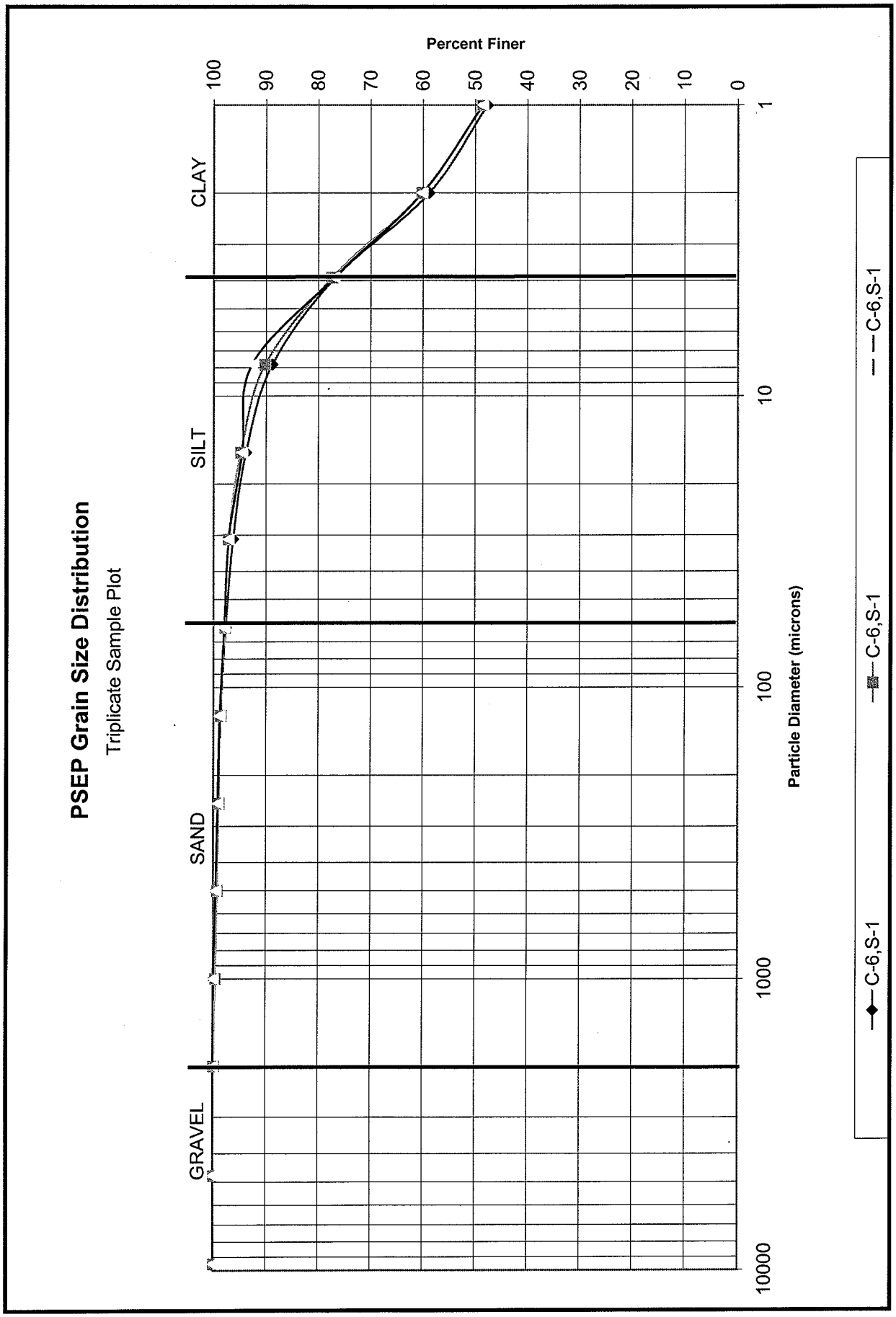
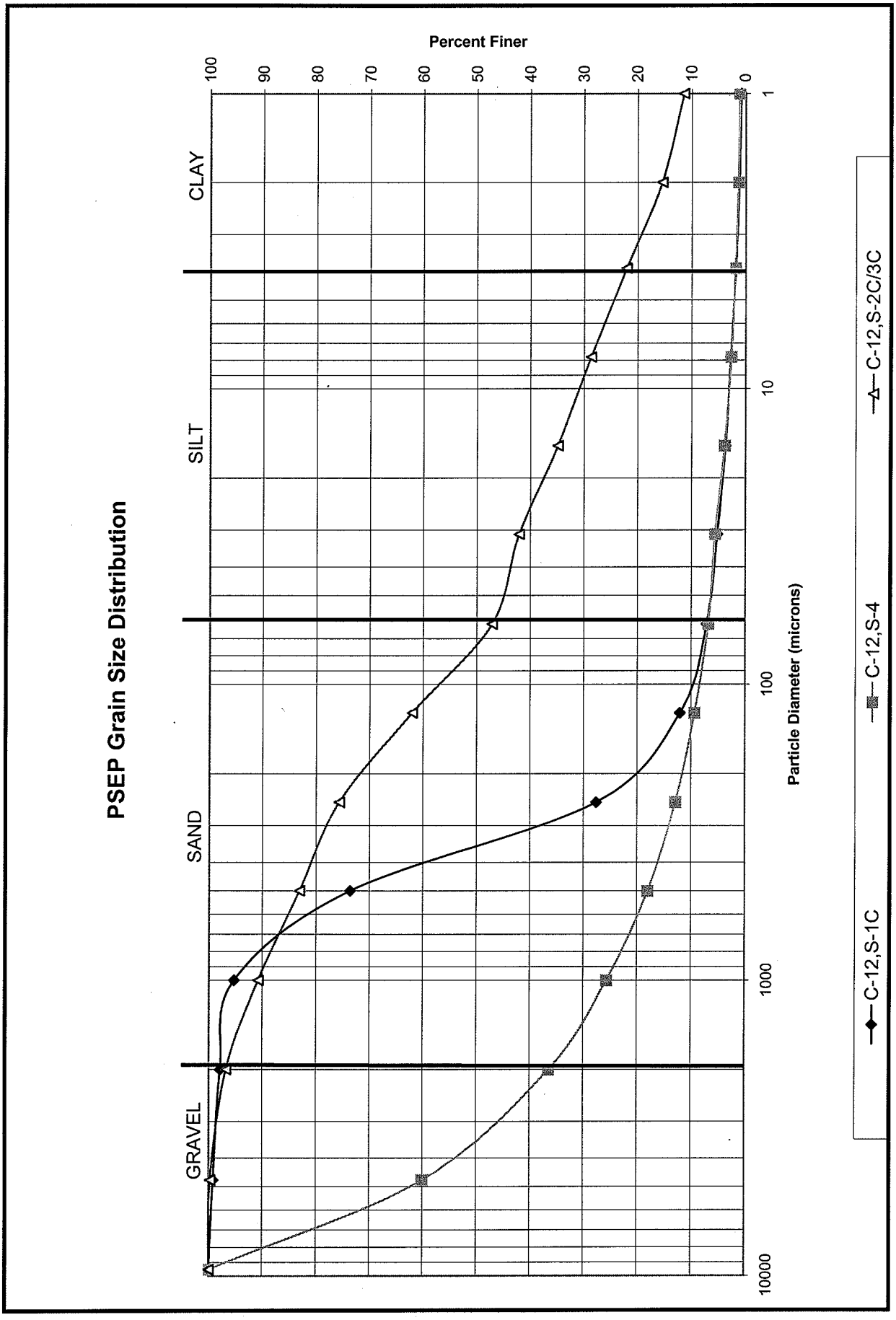
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